

**ASPECTS OF VERBAL MORPHOPHONOLOGY OF CILENGE WITH
SPECIAL REFERENCE TO NEGATION AND TENSE MARKERS**

by

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submitted in accordance with the requirements for
the degree of

MASTER OF ARTS

In the subject

African Languages

at the

University of South Africa

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I declare that **ASPECTS OF VERBAL MORPHOPHONOLOGY OF CILENGE WITH SPECIAL REFERENCE TO NEGATION AND TENSE MARKERS** is my own work and that all the sources that I have used or quoted have been indicated and acknowledged by means of complete references.

Abstract

Negation and tense markers in the verb structure have been the subject of diverse linguistic descriptions, especially in Bantu languages. In Mozambique, however, many Bantu languages, including Cilenge, have not been sufficiently studied. Therefore, the main purpose of this study is to examine tense and negation in Cilenge, with special reference to the strategies used to indicate negation and various tenses, from data collected in the *Valenge* community in Chidenguele, Manjacaze district, Gaza province. The study has shown that this language has wide categories of the past, while the future may be closer or distant and the present appears as focused, habitual, continuous and progressive. The variation and positioning of tense markers are mainly determined by the characteristics of the verb root. In relation to negation, Cilenge employs three strategies: the negative concord, the post-initial and the post-verbal. In some contexts, negative markers may also signal tense.

Key terms: Cicopi; Cilenge; sound system; tone; Bantu language; nominal classes; pronouns; verb structure; tense markers; negation markers.

Acknowledgements

I am deeply indebted to my supervisor, Professor Sozinho Francisco Matsinhe, for the encouragement during my postgraduate studies at UNISA and sustained intellectual support over the work. I am very grateful to Professor Ing Kosch for prompt and detailed responses to my inquiries. I also thank Mrs. Hleziphi Napaai for her technical assistance skills at UNISA library main campus.

I thank the Mozambican Universidade Pedagógica, where I am a lecturer, for the sponsorship of my study. My special thanks to Inocência Manuel, the Director of Finance, and all the staff for their effort and unfailing assistance over the course of the study.

Thanks also to those at Chidenguele whom I interviewed during my research. In particular, I wish to thank those whose assistance have been relevant in obtaining the data used in the study.

I thank my children for keeping me in their hearts during my constant absence, and for the warmth of their welcome. I am forever grateful to my wife, Irondina Senete, for the understanding, support and encouragement over the study.

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Abbreviations and symbols

2SG	second person singular
ADV	adverb
APPL	applicative extension
ASSOC.	associative marker
C	consonant
CAUS	causative extension
CL	nominal class
CON	conditional
COP	copula
D	derivational
DIM	diminutive extension
EXT	verb extension
FREQ	frequentative extension
FUT	future-tense marker
FV	final vowel
GEN	genitive
H	high tone
HORT	hortative
I	inflectional
IDEO	ideophone
INTERJ	interjection
IMP	imperative marker
INDE	National Institute for the Development of Education
INE	National Institute of Statistics
INF	infinitive marker
L	low tone
LOC	locative
NEG	negative marker
NELIMO	Nucleus for the Study of Mozambican Languages
NP	noun phrase
OBJ	object

OM	object marker
PASS	passive
PEBIMO	Bilingual Education Project for Mozambique
PL	plural
PI	pre-initial
PN	proper noun
POT	potential
PREF	prefix
PRES	present-tense
PS	post-subject
PST	past-tense
RAD	verb radical
rc	relative concord marker
RECIP.	reciprocal extension
REL.	relative marker
RFL.	reflexive extension
SING.	singular
SM	subject marker
STAB.	stabilizer
STAT.	stative
SUBJUN	subjunctive
TAM	tense/aspect marker
TM	tense marker
UR	underlying representation
VP	verb phrase
Ø	zero
<	derived from
>	becomes
*	unacceptable

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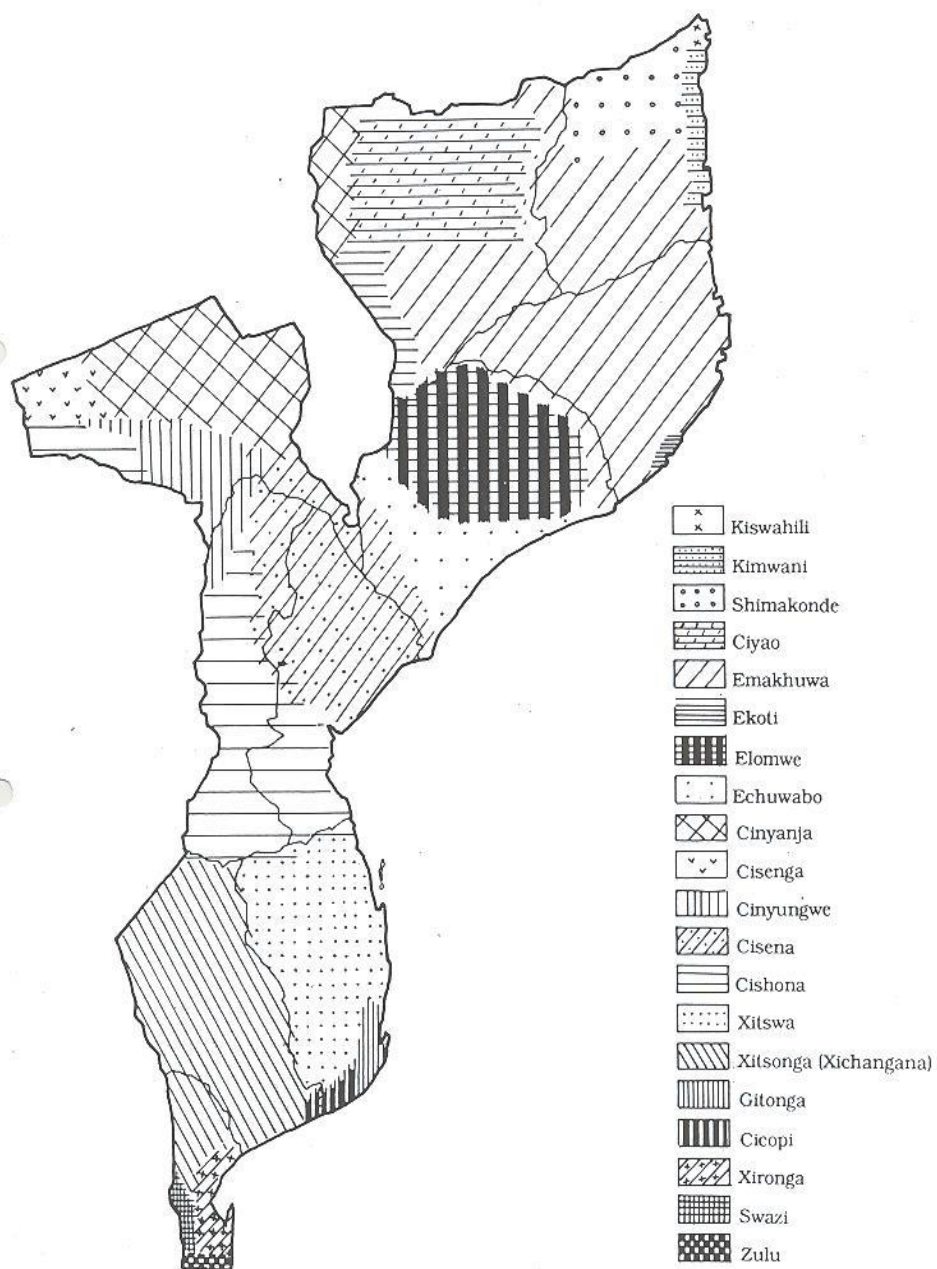


Figure 1: Linguistic map of Mozambique (NELIMO 1989:8)

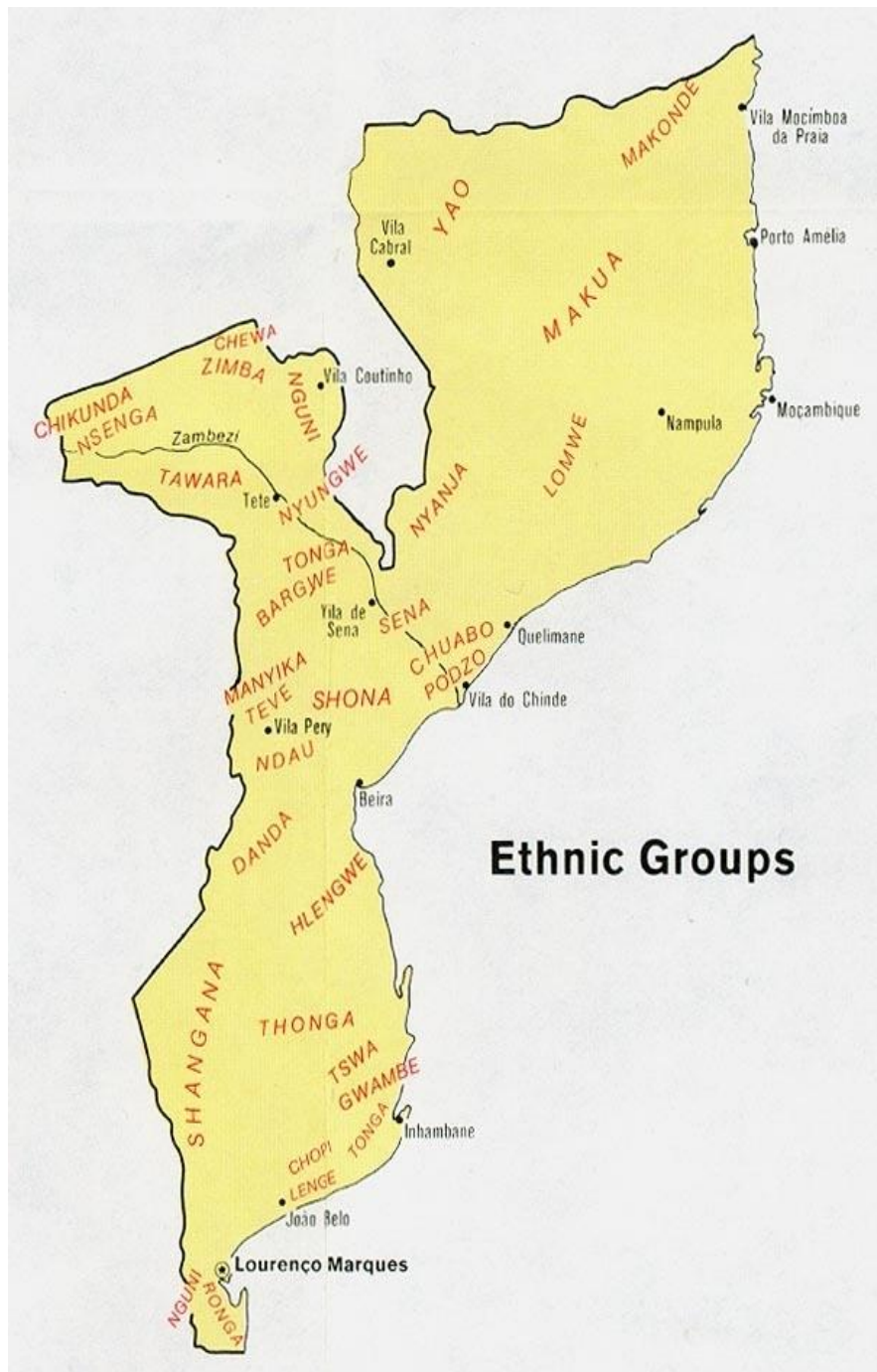


Figure 2: An old map showing main ethnic groups of Mozambique (1973). <http://mapas.owje.com/maps/3631/mozambique-ethnic-groups-map.html>. [Accessed on 20/06/2012].

Chapter One: Introduction

1.1 The country

With a surface area of 799,380 square kilometres, the Republic of Mozambique gained independence from the Portuguese in June 1975. It is bordered for 2,515 kilometres by the [Indian Ocean](#) to the east, [Tanzania](#) to the north, [Malawi](#) and [Zambia](#) to the northwest, [Zimbabwe](#) to the west and [Swaziland](#) and [South Africa](#) to the south. The capital city is [Maputo](#), (known as [Lourenço Marques](#) before Independence) (Barca & Santos 2005:5–6). Its population is estimated at 20 million; the majority being of Bantu origin but there are also communities of Asian and European descent.

As illustrated in figure two (on page 8)ⁱ, Mozambique is characterized by a large ethnic, cultural and linguistic diversity. The *Núcleo de Estudos de Línguas Moçambicanas* (NELIMO1989:6) shows a linguistic map with 20 Bantu languages (figure one on page 7), and Ngunga and Faquir (2011:6) present 17 languages, namely Kimwani, Shimakonde, Ciyaawo, Emakhuwa, Echuwabu, Cinyanja, Cinyungwe, Cisená, Cibálke, Cimanýika, Ciwute, Cindau, Citshwa, Gitonga, Cicopi, Xichangana and Xirhonga. However, these languages are those used only in the bilingual education model in gradual implementation, as detailed below.

As stated previously, Mozambique is a multilingual country. The Bantu languages group takes a prominent place in terms of land occupation and number of speakers. According to the figures from the *Instituto Nacional de Estatística* (The National Institute of Statistics) (INE 2010a:45) based on the last census (2007), about 14 million people over five years of age speak Bantu languages (85.3%); approximately 10.7 per cent have Portugueseⁱⁱ as their mother tongue; and 0.3 per cent speak languages of Asian and European origins. Among the Bantu group, Emakhuwa, in the north, is the most used vernacular language (25.3%); Xichangana, in the south, is the second most used language (10.3%); Cisená is the third most used (7.5%), followed by Elomwe and Echuwabo (7% and 5.1% respectively). (INE 2010b:37).

At Independence, "almost the whole population had not attended any formal schooling" (Mário, Buendia, Kouwenhoven, Alberto & Waddington 2002:5) and only 1.2 per cent

of the population had Portuguese as their mother tongue in urban areas (cf. Katupha 2000:7). Although only a small minority of urban elites spoke the former colonial language, it was nevertheless retained as the official language. On the one hand, this situation was justified by the ethno-linguistic diversity: the construction of the new state required national unity, which could be achieved by the monolingual and monocultural processes (cf. Chimbutane 2011:31; Lafon 2006:222). Thus, Portuguese was seen as a tool that could be used to foster national unity. On the other hand, Portuguese was the only language used in administration and other public domains, such as education and justice (Gonçalves 1996:17; Lopes 1997:23 and 2004:19; Lopes 1999:7; Dias 2009:58). This tendency is observed in almost all the African elite, as Spencer (1974:167) denounces:

There was a tendency among educated Africans to see in their use [African languages] the danger that progress for the African peoples and their integration into the modern world would thereby be impaired.

Since Portuguese held the privileged status as the unique official language, the schooling process was conducted exclusively in this language and Bantu languages were discouraged in all official domains, including the classroom until 2003. "This impediment of using mother tongues is seen as a dreadful betrayal and produces a guilty feeling" (Thiong'o 1977:7).

The exclusive use of Portuguese in the classroom resulted in poor education outcomes, mainly in the rural areas where Portuguese is hardly used, although the expansion of the school network and "education boom" was observed after the independence of the country in 1975 (cf. Mário, Buendia, Kouwenhoven, Alberto & Waddington 2002:5).

1.2 The aim of the study

As mentioned earlier, because of the Portuguese colonial language policy, African languages in Mozambique (including Cilenge) have not been sufficiently studied. This study is therefore a contribution to the development of those languages, especially to Cilenge. It is imperative to undertake serious linguistic description of Bantu languages

in general and of Cilenge in particular, with special references to tense and negation markers.

The studies conducted by missionaries laid the foundation for modern studies on African languages even though the study of language was not the main purpose of the missionaries. The only studies of African languages available at the independence, apart from religious literature, are mainly grammars and phrase books.

The first attempt to provide systematic studies on Bantu languages was accomplished by Bleek in 1862, as Meinhof (1928:78) states:

Bleek introduced the method of classifying nominals in Bantu languages taking into account their concord prefixes, and assigning a number of each class so constituted.

Although missionaries had undertaken some studies on Bantu languages of Mozambique (cf. Bleek 1862:7), such studies were not objectively scientific, as they were based on their languages.

For instance, Ribeiro (1965:498), a catholic priest, while working on Xichangana, affirms that there is neither criterion nor a regular norm for adapting indigenous terms to Portuguese (found in books, maps and official documents), as illustrated from Ribeiro (1965:499):

(1) Languages spoken in the region:

- a. *Machangana*
- b. *Shi-changana*
- c. *Muchope*
- d. *Shi-chope*

From these examples, it is clear that there is arbitrariness, a lack of criterion, inconsistency and ignorance in adapting indigenous terms to Portuguese (Ribeiro 1965:499). In fact, the same language (Xichangana) is presented with different prefixes (*ma-* and *shi-*), as shown in (1a) and (1b); the same occurs in (1c) and (1d) for Cicopi, where the prefix *ci-* should be used.

The lack of criterion in writing had been also acknowledged by Junod (1933:10), a Swiss missionary, while working on Cicopi, when he says:

It est extrêmement difficile d'arriver à une orthographe satisfaisante des langues bantoues.

(It is extremely difficult to arrive at a satisfactory orthography of the Bantu languages)

As already seen, the main shortcoming of the works of missionaries was that the orthography systems used in their description was mainly inspired and informed by the writing systems of the languages of the countries of their origin, that is, English, French and Portuguese. These writing systems adopted by the missionaries are still the subject of protracted debate whenever work on the harmonization of African languages is discussed. For instance, Ribeiro (1965:500) had claimed that *chope* should not be written as *xope* or *shope*, as these forms are not in accordance with the orthographic structure of Portuguese.

Maheme (2010:5) claims that Cicopi should be written as *Txitxopi*, based on the Portuguese alphabet used by catholic missionaries since 1943. According to Maheme, by using *tx* instead of *c*, mistakes and ambiguities would be avoided in reading and writing in both languages (Portuguese and Cicopi), essentially when spreading Christianity using this Bantu language.

Considering the foregoing, this study is therefore an attempt to provide an objective description of Cilenge, and in so doing, contribute towards the promotion and development of Bantu languages. The next section will provide information on the Cicopi.

1.3 The Copi group

The Copi language is spoken in the districts of Inharrime, Homoine and Zavala in the Inhambane province, and in the districts of Manjacaze and Xai-Xai in the Gaza province. According to the figures from the National Institute of Statistics (INE), it is the mother tongue of approximately 127,000 people from the age of five in both provinces (INE 2009:28–9). Using data from the former census, Siteo & Ngunga

(2000:167) identify six varieties of Cicopi, including Cilenge, which is the main concern of this study. Figure 3 below represents the varieties of this group.

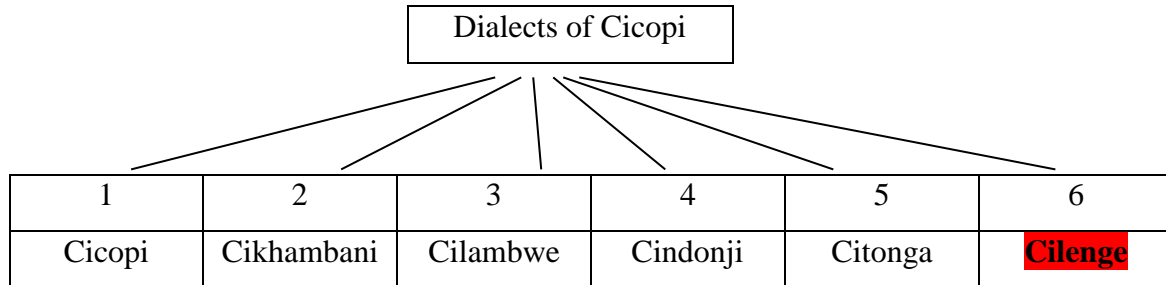


Figure 3: The Copi group (adapted from NELIMO 1989:96)

The term *Copi* was borrowed from the Zulu verb *kutchopa* "to shoot with arrows". It is therefore associated with the use of a bow as a weapon by the people living along the Indian Ocean coast from the Limpopo River to Inhambane (cf. Junod 1933ⁱⁱⁱ; Santos1941). Shooting with poisoned arrows was considered their best hunting techniques. The *Copi* are said to use a poison, *nungu*, to smear the tip of their hunting arrows that immobilizes even huge animals like elephants. They are called *Vacopi* "the ones who shoot with bows".

The Copi language (whose dialect Cilenge is the subject of this study) is referred to as Lenge, as seen in Johnston (1919:281–96); Doke (1945:74, 97); Guthrie (1948:82 and 1971, vol. 2 part I: 63); Meinhof & van Warmelo (1932:18); Maho (2001:116). Thus, it could be concluded that the nomenclature requires further research.

As will be seen in a detailed discussion in Section 3.1 on noun classes in Bantu languages, names are formed by the agglutination of affixes around the root or stem. For instance, from *-cop-* "shoot with arrow" it is possible to derive new words, such as *va-cop-i* "people who shot". For designating the language, the prefix *ci-* of class 7 (the class for **things** and **languages**) is used: *ci-cop-i* "the language of Copi people".

According to Guthrie's (1971) classification of Bantu languages, Cicopi belongs to group (S.60). This group comprises two languages which display reduced mutual intelligibility: S.61 ciCopi (Lenge), and S.62 giTonga (Shengwe)^{iv}.

Cilenge is located south of the district of Manjacaze and is spoken in the southeast, from Chidenguele, in the Manjacaze district, to Chongoene, in the Xai-Xai district.

For Siteo & Ngunga (2000), Cilenge is the only variant not spoken in the Inhambane province.

1.4 The research question

As stated in Sections 1.1 and 1.2, the Bantu languages of Mozambique have not been sufficiently studied, due mainly to the inherited colonial language policy. As a result, little is available on Cilenge, especially on the verb complex. Taking this into consideration, the following research questions have been formulated to guide the study on tense and negation markers in that language:

- How are tense markers signalled in the verb complex of Cilenge?
- How does Cilenge mark the negation in verb complex?
- Is there any interaction between tense and negation?

The first question aims to identify and analyse the inflectional affixes of the Cilenge verb. The second question seeks to identify and analyse the negation markers in this language. The third question intends to examine the effects that negation markers have on the tense in Cilenge. The study is basically descriptive, based on morphophonological analysis.

1.5 Context of the study

This study, apart from contributing towards the description of Cilenge, is also a contribution to bilingual education in Mozambique. As stated above, Bantu languages were not used in formal instruction during the colonial era and this situation remained unchanged in post-independent Mozambique. The prevailing situation has left the Bantu languages greatly marginalised and on the periphery; indeed, there has been paucity of studies on these languages in general and on Cilenge in particular. This statement is reinforced by Doke (1945:97), when he says that

For Chopi (or Lenge) and Tonga (giTonga) of this group, there is very little of importance published.

For that reason, this work should be seen as a contribution towards the study of African languages in general and Cilenge in particular. In fact, the introduction of Bantu languages (including Cilenge) in schools in Mozambique requires solid descriptive work on those languages to allow the production of learning and teaching materials such as dictionaries and pedagogic and referential grammars.

On the other hand, the effort of instilling a culture of democracy in Mozambique can only be possible through the participation of all Mozambicans. An effective and sustainable development mainly in rural areas demands communication with local people. This can, in turn, be possible if the languages spoken by the vast majority of Mozambicans are used in formal environments, and accepted in society and in all sectors.

1.6 Data

To conduct the study on the negation and tense markers in Cilenge, apart from relying on my own intuition as a native speaker of this language, reliable data has been collected amongst other native speakers in the *Valenge* community in Chidenguele. Informal interviews and a questionnaire (Appendix C) were used to solicit further information on the verb complex in Cilenge and transcribed and analysed in detail using a grill with selected verbal forms, as indicated in Appendix A and B. The informants were teachers of Cilenge involved in bilingual education. Other informants were pastors at an Anglican mission station. Old women and a leader of the village were also elicited as informants. All these people use formal Cilenge in their activities and therefore they offer an acceptable elicitation. Furthermore, a literature review was conducted on the available works on Cilenge.

Cilenge language data used in this study were collected through three strategies: (i) introspection: our linguistic competence (as native-speaker) has played an important role as the data source was employed for all grammatical judgements on tenses and verb forms; (ii) elicitation: a questionnaire based on three questions was drawn to observe the way in which tense and negation markers occur in the verb complex when other native-

speakers talk about recent, past and future plans or facts. Informal talks were also useful for the elicitation; (iii) corpus linguistics: available works on Cilenge and Cicopi were reviewed. These methods allowed us to compare sentences and check the occurrence of negation and tense markers.

1.7 Objectives of the study

Specifically, this study aims to analyse the verbal morphophonology of Cilenge, focusing on tense and negation markers in this language. It has the following objectives:

1.7.1 General objective

- To analyse the verbal morphophonology of Cilenge with reference to negation and tense markers.

1.7.2 Specific objectives

- To establish the forms and strategies of tense demarcation in Cilenge;
- To describe the negation strategies in the verbal complex;
- To determine the effects of negation on tense.

The choice of morphophonological analysis is based on the principle that the variation and the positioning of the morphemes are determined by rules, such as assimilation, elision and fusion (Finch 2000; Crystal 1992; Fromkin, Hayes, Curtiss, Szabolesi, Stowel, Stabler, Sportiche, Koopman, Keating, Munro, Hyams, & Steriade 2000). These phonological processes affect tense markers, and taking this into consideration, the verb complex of Cilenge will be examined.

1.8 Organisation of the study

This dissertation consists of five chapters. Chapter one contains the general introduction to the study. In particular, it presents the basis of the study and the methodology adopted. It also provides some basic information on the language. Chapter two contains the literature review. Chapter three provides a general description of Cilenge, focusing on phonetics, phonology, noun classes and verb morphology. Chapter four focuses on negation and tense marking in Cilenge and can therefore be regarded as the main chapter of the study. By a way of conclusion, a major summary of the study and suggestions for further research on Cilenge is provided in chapter five.

Chapter Two: Literature Review

2.0 Introduction

This chapter provides a review of previous studies on the tense and negation markers on the verb in Bantu languages in general and Cilenge in particular. The review provides a basis for the present study and it firstly focuses on tense and negation in languages in general. Secondly it deals with Bantu languages in general and Cilenge in particular. It is divided into three sections. Section 2.1 gives an overview on the verb category in general. Section 2.2 has three subsections. The first subsection deals with the verb structure in Bantu languages; the second subsection analyses tense and the third subsection focuses on negation. Section 2.3 reflects on earlier studies of the verbal complex in Cicopi and in Cilenge in particular.

2.1 Verb category

The reason for reviewing the verb category is that tense and negation markers are part of that category, as in any Bantu language. There have been a large number of studies on verb category. For instance, scholars such as Faria, Pedro, Duarte & Gouveia (1996) maintain that the verb is a syntactic category, i.e. it is a head of a verb phrase (VP). On the other hand, Radford, Atkison, Britain, Clahsen & Spencer (1999) argue that the verb is a lexical category, in the sense that it can change form to indicate tense, person, mood, voice, number, and aspect. Consider the examples taken from Radford, Atkison, Britain, Clahsen & Spencer (1999:154).

- (2) a. Harriet *took* a picture of Dick
b. Harriet *is taking* a picture of Dick
c. Harriet *has taken* a picture of Dick
d. A picture of Dick *was taken* by Harriet

The variety of forms of the verb signals the time when the action or event occurs. While in (2a) the event is presented as taking place in the past, in (2b) the same action or event is presented as taking place in the present. In (2c) the event took place in the past, but the action affects the present time. In (2d) the action took place in the past, as

in (2a): the latter appears to distinguish the passive voice, whereas the former is used for active voice.

As seen in these examples, some inflection forms are accompanied by auxiliary verbs to signal present progressive (2b), perfect participle (2c) and passive (2d). On the contrary, as in many Bantu languages, in Cilenge those inflectional categories are part of the verb complex structure.

While dealing with the Bantu verb, Doke (1935:217) defines the verb as “a word which signifies an action connected with a substantive or the state in which a substantive is, and is brought into concordial agreement therewith by the subjectival concord”, and he emphasizes the remarkable inflexional possibilities of the Bantu verb. In fact, it is the verb which hosts the negation and tense markers.

The verb has been the subject of many studies, due to its complexity that characterizes verbal inflections in general and in Bantu languages in particular. This fact has led Guthrie (1967:14) to argue that "this category [verb] is not easy to define in the way universally applicable to any Bantu language".

2.2 Early studies of verb structure in Bantu languages

As already said, Bantu verb has been the subject of many substantial studies and several structures have been proposed, by virtue of the remarkable number of verb stems and inflexional possibilities. This section attempts to provide a description of the morphemes and their roles in the verb structure in Bantu languages. Special reference is made to ways of expressing tense and negation markers, based on generativists and relationalists such as Guthrie (1967), Meeussen (1967), Nida (1976), Kamba Muzenga (1981), Katamba (1993), Matsinhe (1994), Miti (2001), Nurse (2003) and Mchombo (2004). Now we consider Bantu verbal structure.

2.2.1 Verb structure of Bantu languages

2.2.1.1 Introduction

As noted in subsection 2.1, there have been various discussions on the verb in general and in the Bantu languages in particular. This subsection aims to analyse several proposals of the verb structure of Bantu languages in order to establish the positioning

and sequence of tense and negation markers. Thus, it is essential to review earlier studies of Bantu verbal structure.

2.2.1.2 Malcolm Guthrie

Guthrie (1967:14) points out that the verb of Bantu languages is distinguished by the presence of several recognizable types of elements such as prefixes, radical, tense sign, suffixes, base, and extension. From the foregoing, there are three implicit kinds of morphemes in the verb complex: grammatical morphemes (**prefixes** and **suffixes**, termed inflectional affixes); derivational morphemes (**extensions**, also known as derivational suffixes); lexical morpheme (the base to which grammatical and/or derivational morphemes are attached, i.e. the **radical** or root).

It could be observed that inflectional affixes encode information on tense/aspect, negation, subject, object, mood, and so on, derivational suffixes alter the lexical meaning and/or affect the argument structure of the verb they are attached to (Matsinhe 1994; Mchombo 2004; Hyman 2007).

2.2.1.3 Achille Emile Meeussen

While Guthrie's (1967) approach emphasizes the agglutination of morphemes in the Bantu verb, Meeussen (1967:108) attempts to establish the specific order in which the elements of the verb should appear, as he states:

The verb, including nominal and pronominal verb forms (mixed forms), exhibits a clear structure with definable elements occurring in a fixed order.

He suggests the sequence of morphemes in eleven slots, as shown in (3) below:

(3) **Pre-initial+Initial+Post-initial+Formative+Limitative+Infix+Radical+Suffix+Pre-final+Final+Post-final**

The complex verb structure comprises the radical to which various elements are prefixed and suffixed. As seen in 2.2.1.2 above, prefixes and suffixes encode grammatical and syntactical information. Thus, **Pre-initial** comprises two elements: indirect relative and negative absolutive. **Initial** encodes information on persons or nominal prefix (subject

concord marker). **Post-initial** involves negative element. **Formative** involves tense and mood (conditional). **Limitative** encodes expression of modality (perstitive), aspect (inceptive) and motion. **Infix** involves the object marker. **Radical** and **suffix** comprehend the radical with extensions, i.e. extended radical. **Pre-final** involves aspectual information (imperfective, repetitive or habitual). **Final** entails information on tense, negation and mood. **Post-final** presents the plural of imperative. However, it seems that Meeussen did not specify what indirect relative is in the verb complex.

Although Meeussen's (1967) structure is generally used in many studies on Bantu languages, it does not seem to accommodate the facts in Cilenge, especially as the negation marker occurs in this language, as will be seen in subsection 2.3.6 below.

2.2.1.4 Lazarus Miti

Describing Cinsenga, a Bantu language spoken in Zambia and Malawi, Miti (2001:79) states that the basic structure of the verb in Bantu languages “consists of a radical (rad) and affixes. The affixes may include subject markers (sm), object markers (om), tense and aspect markers (tm) and several derivational suffixes”, and the summarized form is: **sm-tm-rad-fv**. This proposal differs partially from Meeussen's (1967) because it does not foresee neither pre-initial nor post-final. However, according to Miti, this basic verbal form may be lengthened by addition of more prefixes and/or suffixes, as seen in the examples taken from Miti (2001:79 and 82).

- (4) a. *si- ni- ka- mu- lil- il- a*
 NEG SM TM OM RAD APP FV
 ‘I will not cry for him/her’
- b. *mu- i- wel- a*
 SM TM RAD FV
 ‘you came’ (before today)

In the examples above, tense and negation markers are prefixed, either in future tense in (4a) or in past tense (completed non-hodiernal past) in (4b). It should be observed that in (4a) negation marker appears before the subject marker. Nonetheless, as detailed in Chapter Four, in Cilenge tense and negation markers also appear as suffixes.

2.2.1.5 Derek Nurse

Nurse (2003:90-91) gave a new look at the Bantu verb structure, based on the following proposal:

Initial – Subject – Negative - T(A) - Object ≠ root - Extension(s) – Final – Suffix

Where: **Initial** stands for negative and relative markers; **Subject** stands for subject marker; **Negative** stands for negative marker; **T(A)** stands for tense and aspect markers; **Object** stands for object marker; **root - Extension(s)** stands for simplex radical or extended radical; **Final** stands for mood, aspect, negation and tense markers; **Suffix** stands for imperative plural marker,

Although this structure is similar in most Bantu languages, the author recognises that individual languages express a range of other categories at Initial and at Suffix. In fact, tense is encoded in three slots: Initial, T(A), and Final; negation may be expressed in three slots too: Initial, Negative, and Final. Consider the following example in (5) taken from Nurse (2003:92) on Haya, a language spoken in Tanzania.

- (5) Haya
- a. tu- Ø≠ gúr-a
We-zero-buy-a
'we buy'
 - b. ti- tu- Ø≠ gúr- a
NEG-we-zero-buy-a
'we don't buy'
 - c. ni- tu- Ø≠ gúr- a
PROG-we-zero-buy-a
'we are buying'

The example in (5a) shows four slots: Subject, Tense (unmarked), Root and Final, whereas (5b) and (5c) present Initial, Subject, Tense (unmarked), Root and Final. While the Initial in (5b) signals negative marker, in (5c) it encodes aspect marker.

As seen, the verbal structure in Bantu languages has been subject of various studies because of restrictions imposed by particular languages. An overview of subsequent studies shows that some present similar structures (e.g. Nurse 2003:90; Güldemann &

Hagemeijer 2006:6), others are shortened (e.g. Miti 2001:79; Tanda & Neba 2005:203) or deeply modified (e.g. Devos & van der Auwera 2009:2). The fact that several exceptions are found in the previous structures constitutes strong evidence that more must be done on the verbal structure of Bantu languages, paying attention to the structures that particularize some languages or groups of languages not sufficiently studied, such as Cilenge. Now we turn to the terminology in the next subsection.

2.2.1.6 Terminology

As already pointed out, due to the complexity of verbal structure of Bantu languages, there have been several structures proposed by scholars, and the terminology employed normally differs. For instance, in describing the verbal structure of Kikongo, Matsinhe & Fernando (2008) refer to the verb root (VR), to which prefixes (to the left of VR) and suffixes are agglutinated; the final vowel can contain information on tense, aspect, mood and focus. They still consider the extensions as verbal affixes.

Thus, verbal affixes on the one hand can be viewed as inflectional morphemes and on the other as derivational morphemes (cf. Miti 2001:79; Rose, Beaudoin-Lietz & Nurse 2002:3). In the next subsection we consider the tense.

2.2.2 Tense

Tense has been the subject of various studies both in Bantu and other languages. For instance, Nida (1976) provides a morphological description of the word in general, whereas Comrie (1985), Katamba (1993), and Radford *et al.* (1999) present a general view of tense, in the sense that the approach is not based on a specific language. Finch (2000) and (2003) provides an analysis of tense in English, whereas Nurse (2003) deals with tense in Bantu languages.

Based on English run, ran; walk, walked, Nida (1976:167) argues that tense is “frequently divided into three primary classes: past, present, and future”. These “classes” are labelled absolute tenses as they are regarded as tenses which take the present moment as their deictic centre. As we shall see in Chapter Four, Cilenge displays four types of present tense. According to the author, past tense may be divided into (i) remote past, (ii) regular past, and (iii) near past, and future time may be divided

into (i) near future, (ii) regular future and (iii) remote future, as in many Bantu languages.

It should be observed that the terminology employed by Nida (1976:167) does not include those languages that distinguish few (as Cilenge) or more degrees (as Cinsenga) of tense. In many Bantu languages, tense, as the representation of the moment in which an event takes place, may appear with different numbers (e.g. two or multiple past references). The examples below taken from Miti (2001:81-3) illustrate the occurrence of four degrees of past in Cinsenga, a Bantu language spoken in Zambia and Malawi.

(6) Cinsenga

- a. SM- i- RAD- a
mu- i- wel- a
mwíwêla
‘You came’ (before today)

- b. SM- a- RAD- a
mu- a- wel- a
mwawêla
‘You came’ (today)

- c. SM1- enze- SM2- i- RAD- a
mu- enze- mu- i- wel- a
you be-past you- past-come
mwenze mwíwêla
‘You had come’ (before today)

- d. SM1- enze- SM2- a- RAD- a
mu- enze- mu- a- wel- a
you be-past you-past-come
mwenze mwáwela
‘You had come’ (today)

It should be observed that in Cinsenga there are two points of time reference: “the day of utterance (today) and the specific time of utterance (now or the present moment)”. While in (6a) the verb refers to an event that occurred before today (a *completed non-hodiernal past*), in (6b) the verb form refers to an event that occurred before the present moment but not before today (a *completed hodiernal past*). In (6c) and (6d) the verb forms refer to past events which have some implication for the present (an *implicative*

past). Whilst (6c) presents an *implicative non-hodiernal past*, (6d) illustrates an *implicative hodiernal past*.

It seems that the distinctions of tense differ according to the system of language or perspective of analysis. This fact leads to multiple terminologies, as already observed in (2.2.1.6). This is well illustrated in Nurse's (2003:99) argument:

Present is the moment of time between past and future and in many discourse situations that moment is fleeting. When grammars claim that a language has several presents, i.e., several identical ways of referring to the same fleeting moment, we have to be sceptical. These "presents" are usually aspects rather than tenses, i.e. they are different representations of the time within the event.

This suggests that one tense can encode several aspects, because an event can be analysed as prior, simultaneous or posterior to the speech time, or even as a complete or incomplete state. As a result, the labels used to describe tense keep increasing, for instance: perfect tense, imperfect tense, habitual tense, narrative tense, aorist tense, continuous tense, progressive tense, and so on. This can be seen in Doke (1935:209), Siteo (2001:226–7), Miti (2001:84) and others.

There have been various proposals of tense formative in Bantu languages. For instance, Meinhof & van Warmelo (1932:45) argue that "*-ile* is the end of the perfect", and the *-í* is resulting from consonant changes in some languages. They also assume that "*-ide* even becomes *-ite* in verbs where it is preceded by *l* or *nd* in Yao".

On the other hand, Guthrie (1948:71) considers two suffixes in Copi: *-ile*, *-ite*. According to him, the latter is used with radicals consisting of consonants only. Furthermore, Meeussen (1967:111) presents *-ide* as past or perfective marker of Proto-Bantu, which possible regional variants may have been as *-ile*, *-i*., whereas Gowlett (2003:634) shows ***ile* as the desinence form which may take a variety of forms in the various languages.

The fact that the inflectional markers of tense varies considerably within the same language demands explanation about the subjacent motivations of these occurrences, i.e.

details on grammaticalisation and the variations forms of morphemes of tense are required, especially in those languages that have not been sufficiently studied, such as Cilenge. For example, in Cilenge the distribution of the forms of past tense marker *-ile/-i*, *-ite/-te* is determined by the structure of the radical and the nature of the last consonant, as will be seen in Chapter Four. We shall now consider negation.

2.2.3 Negation

As is the case with tense, there have been various studies on negation both in Bantu and other languages. For instance, Kamba Muzenga (1981) provides a morphological description of negation in Bantu languages, whereas Bybee (1985) and Crystal (1992) present a general view of negation, and Zanuttini (1997) deals with negation in Romance languages, mainly.

Negation has attracted the interest of linguists due to the remarkable complexity of negation patterns involved in singular or related languages. According to Tanda & Neba (2005:201), the expression of negation may entail either the addition of a free morpheme or a bound morpheme to a proposition or a verb. However, the definition of free or bound morphemes may be seen as an unfinished debate, by virtue of the type of languages involved in certain analyses. This is in accordance with Hendrikse & Poulos (2006:246-54), when they claim that

The classification of word categories (or parts of speech) in African languages has been modeled on Western European languages without taking cognisance of the fact that the European and African languages belong to different language types. Words in an isolating type of language are predominantly free morphemes and the words in agglutinating type of language are predominantly affix-dependent.

A wide range of negation types in Bantu languages have been presented (cf. Guthrie 1948, Nurse & Philippson 2003, and Devos & van der Auwera 2009, among others). According to the language or group of languages, this grammatical element may entail single or multiple negations consisting of two or three elements, either as prefixes and/or suffixes. For instance, **pre-initial** and **post-initial** negative markers are considered pre-verbal negation marked by prefixes before the verb stem (cf. Güldemann & Hagemeijer 2006:6), and are labelled NEG1 in Bantu studies (cf. Devos & van der

Auwera, 2009:31). On the other hand, **post-verbal** negative markers are placed immediately after the verb, and are labelled NEG2. Consider the following examples from Sitoe (2001:228).

(7) Changana

- a. *á- hí- nga- tírh- í*
 NEG1-we-NEG1-work-NEG2
 ‘we were not working’

- b. *a- hí- nga- sí- tírh- á*
 NEG1-we-NEG1-NEG1-work-FV
 ‘we had not worked yet’

The negative in (7a) is formed by means of using three negative formatives (two prefixes and one suffix): pre-initial *a-*, post-initial *-nga-* and post-final *-i*. Also in (7b), there are three negative formatives, but all occur in the prefixal position: one pre-initial *a-*, and two post-initials *-nga-*, *-sí-*. As already seen, these few examples of the sole language display diverse location and form of negative formatives. This demands additional descriptions and systematizations in those languages with paucity of studies such as Cilenge.

Another observation is that the negative marker can be realized by different **allomorphs**: “several realizations of the same grammatical morphemes, depending on the phonological shape of the root verb they are added to” (Clark 1993:104). This issue may be well illustrated with negative markers *-se-*/*-sa-* taken from Malete (2003b:196).

(8) Sesotho

- a. *Ke-batla[hore ho se phehe [mosadi]*
 ‘I want that a woman should not cook’

- b. *Ke-fihlile [ho sa phehe [mosadi]*
 ‘I arrived while a woman was not cooking’

According to Malete (2003b), in (8a) the negative morpheme *-se-* is used in the subjunctive clause, whereas the negative morpheme *-sa-* is employed in the participial clause.

As seen, there is a wide range of negation types in Bantu languages and it is so complex that it seems impossible to establish a suitable characterization for all of them. Indeed, some characteristics that seem to be particular to Cilenge should be explored.

These subsections have analysed how are tense and negation marked in the verb complex in Bantu languages in general. Indeed the following section will examine previous studies undertaken on tense and negation in Cicopi.

2.3 Early studies of tense and negation in Copi

2.3.1 Introduction

As mentioned in Chapter One, the work on Copi undertaken by missionaries laid the foundation for serious descriptive studies of this language, including this study. The missionaries resorted to their knowledge of European languages and some of them were not motivated solely by the accurate description of the language. It should be observed that the lack of criterion in writing referred to in Section 1.2 prevails. In the next subsection, we consider Junod.

2.3.2 Henri Philippe Junod

2.3.2.1 Tense

One of the missionaries who have contributed to the study of Copi and other Bantu languages spoken in Mozambique is Junod. In his *Éléments de grammaire tchopi*, Junod (1933) identifies the following tenses: three presents (*present present*, *durative present* and *present*); two futures (*future*, and *anterior future*); three pasts (*past*, *pluperfect*, and *imperfect* or *progressive*); and two conditionals (*present conditional*, and *past conditional*).

With regard to the three presents (*present present*, *durative present* and *present*), consider the following examples taken from Junod (1933:31-32).

- (9) a. *ni- tchi- won- a*
 1SG SM TM see FV
 ‘now I see’

- b. *ni-* *tchingadi-* *ni-* *tchi-* *won-* *a*
 1SG SM TM 1SG SM TM see FV
 ‘I am going to see’
- c. *ni-* *man-* *a*
 1SG SM find FV
 ‘I find’

According to the author, in (9a) the particle *tchi* is frequently employed to indicate the **present present** (in the sense that the action is going on now), while in (9b) the particle *tchingadi* denotes the **durative present** (in the sense that the action is prolonged) ; and (9c) the **present** without a specific marker (it may be considered atemporal). From these examples, we can observe that when the particle *tchi* occurs alone (see 9a) it refers to the present present and when preceded by *tchingadi* it marks the durative present (see 9b). The third present (atemporal) is particularized by Ø tense marker, as seen in (9c).

Junod (1933:32) presents another **present present** whose tense marker is *-a-*, as illustrated in (10). It should be noted that the example given by the author appears without glossing, so is not clear what is the difference between (9a) and (10).

- (10) *ni-* *a-* *man-* *a*
 1SG SM TM find FV
 ‘now I find’

While Junod (1933) suggests these three kinds of present, the data seems to suggest that there is a fourth type: present tense with an obligatory object. The example in (11) seeks to make it clear.

- (11) a. Ani *ni-* Ø *dy-* *a* *nyama*
 I 1SG SM TM eat FV 9meat
 ‘I eat/am eating meat’
- b. *Ani *ni-* Ø *dy-* *a*
 I 1SG SM TM eat FV
 ‘I eat/eating’

The sentences in (11a) and (11b) suggest that, when the tense marker is unmarked or zero form (Ø), the object (e.g. *nyama* ‘meat’) must occur obligatory. If the object is

omitted the sentence is unacceptable as seen in (11b). This issue will be detailed in Chapter Four.

After this brief review of Junod's types of present in Copi, we will focus on future tense.

As already referred to, Junod (1933:31) presents two futures (*future*, and *anterior future*), as follows in (12):

- (12) a. *ni- na- won- a*
 1SG SM FUT see FV
 'I will see'
- b. *ni- na- v- a ni- won- ile*
 1SG SM FUT be FV 1SG SM see PST
 'I shall have seen'

The **future** (in the sense that the action takes place hereafter) in (12a) is marked by *-na-*, whereas the **anterior future** (describing an action that will be finished in the future) consists of using auxiliary verb *kuva* 'to be' in the future tense (where */na/* is the tense marker) and the main verb *kuwona* 'to see' in the past (where */-ile/* is the tense marker) as seen in (12b). Looking closely at these data, one may notice that **anterior future** is a periphrastic construction (using two verbs) whereas **future** shows the tense marker attached to the verb stem. Now we consider past.

With reference to the past, Junod (1933:32) presents a table showing three types: (i) **past**, (ii) **pluperfect**, and (iii) **imperfect** or **progressive**. Consider the following examples taken from the author.

- (13) a. *ni- man- ile*
 1SG SM find TM
 'I found'
- b. *ni- di- man- e*
 1SG SM TM find TM
 'I had found'

- c. *ni- di- man- a*
 1SG SM TM find FV
 ‘I was finding’

From the examples above, we can observe that the **past**, indicating action in past time, in (13a) is marked by *-ile*, while in (13b) the **pluperfect**, expressing an action or event as completed at or before a given past time (Doke 1935:169), is formed by two morphemes: *-di-* and *-e*, the former as prefix and the latter as suffix; in (13c) the **imperfect** or **progressive**, expressing action or state as incomplete or in continuance at the time denoted (Doke 1935:121), is indicated by the tense marker *-di-*. It should be noted that when a discontinuous tense marker is present, *-di-* and *-e* is a characteristic of the pluperfect. After the past, the following analysis will deal with the conditional.

Junod (1933:31) states that the **conditional**, expressing or implying a condition or supposition (Doke 1935:75), is signaled by “*idiku*” and “*kunga*”, as exemplified in (14).

- (14) a. *idiku ni- na- won- a*
 TM 1SG SM TM see FV
 ‘I should see’
- b. *kunga ni- na- won- a*
 TM 1SG SM TM see FV
 ‘I should see’

The examples in (14) show that, however they are differentiated by the use of *idiku* and *kunga*, either (14a) or (14b) share the same morphemes in the verb complex *kuwona* ‘to see’. It seems that these examples do not encode conditional markers. In (14a), the conditional conjunction *idiku* should be translated as “if”; the verb form *ninawona* refers to the future time and it should be translated as “I will see”. Thus, in (15) an appropriate example is proposed.

- (15) *idiku ni- na- won- a*
 if 1SG SM FUT see FV
 ‘if I shall see’

It should be observed that the particle *idiku* ‘if’ in (14a) is not a tense marker; on the contrary, it is a word that connects phrases or parts of sentences. On the other hand, in

(14b) *kunga* is a copula regarded as ‘to be’ or ‘to seem’ and expresses a probability. Taking into account this fact, the following example should be considered.

- (16) *ku- nga ni- na- won- a*
 15 seem 1SG SM FUT see FV
 ‘I probably shall see’

The subsection 2.3.2.1 provided an analysis of Junod’s proposal of tense markers in Copi. The next subsection will focus on negation.

2.3.2.2 Negation

According to Junod (1933:31), in Copi, **negative future** is indicated by the particle -*mba-* or -*mbi-*. Consider the following examples taken from the author.

- (17) a. *ni- nga- mbi- won- a*
 1SG SM FUT NEG see FV
 ‘I shall not see’
- b. *ni- nga- mba- won- i*
 1SG SM FUT NEG see NEG
 ‘I shall not see’

For the author, the affix -*mbi-* in (17a) signals negation and it is placed close to the verb stem -*wona* ‘to see’, whereas in (17b) negation is signalled by two affixes -*mba-...-i*, the former as prefix and the latter as suffix. However, it should be observed that Junod’s (1933) glosses do not show any difference. Furthermore, it is difficult to know when to use bimorphemic negations or a single negative formative, hence an explanation is required.

In relation to **negative present**, Junod (1933:31) points out the pre-initial *kha-* as the unique negative formative. However, looking carefully at the table given by the author, one may notice that *kha-* combines with another morpheme (-*i*) as post-verbal negative marker, as illustrated in (18).

- (18) *kha- ni- won- i*
 NEG1 1SG SM see NEG2
 ‘I do not see’

The example in (18) shows two morphemes acting as negative formatives one as prefix (*kha-*) and other as suffix (*-i*). Thus, the fact suggests that negative present tense in Copi is marked by a bimorphemic negation *kha-...-i*. As seen in 2.2.3 above, *kha-* may be labelled Neg1 and *-i* labelled Neg2. Now we consider negative perfect.

As Junod (1933:32) indicates, the **negative perfect** is signalled by *-sa-* in subordinate clauses. In the main clause, the negative perfect is marked by *-ya-*. However, it should be observed that *-ya-* is preceded by *kha-*. Consider the following examples in (19).

- (19). a. *ni- tsimbi(l)- te ni- sa- won- w- a ngu mthu*
 1SG SM walk PST 1SG SM NEG see PASS FV by 1-person
 ‘I walked while I was not seen by somebody’
- b. *kha- ni- ya- won- a*
 NEG1 1SG SM- NEG1- see- FV
 ‘I did not see’

The subordinate clause in (19a) shows the negative formative *-sa-* following the subject marker. Although this is presented in detail in Chapter Four, if the verb root ends with the lateral alveolar /l/, the perfect tense marker is always *-te* and the consonant /l/ is assimilated, as seen in *-tsimbite* ‘walked’. The example in (19b) displays two negative formatives, one as pre-initial (*kha-*) and the other (*-ya-*) following the subject marker. These facts suggest that the negative perfect, as main clause, bears two negative formatives (*kha-* and *-ya-*), while as subordinate clause it has only one negative morpheme (*-sa-*). After negative perfect we turn to the negative pluperfect.

Although no details are given on **negative pluperfect**, Junod’s (1933:32) table shows two kinds of constructions, as illustrated below.

- (20) a. *n(i)- a- sa- man- a*
 1SG SM TM NEG find FV
 ‘I had not found’
- b. *kha- n(i)- a- nga- man- a*
 NEG1 1SG SM PST NEG1 find FV
 ‘I had not found’

The example in (20a) presents *-sa-* as negative formative following the tense marker *a*. As will be discussed in Chapter Three, the vowel /i/ of the subject marker *ni-* is elided when it precedes the low /a/. In (20b) there are two negative formatives (*kha-*, *-nga-*) the former as pre-initial and the latter following the tense marker. From these examples, it is not easy to establish when we can use each construction. Now we turn to the negative progressive.

The **negative progressive** in Junod (1933:32) is presented as follows:

- (21) *ni- si- man- i*
 1SG SM NEG1 find NEG2
 ‘I did not find’

Here are seen *-si-* and *-i* as negative formatives, the former placed after the subject marker and the latter at the post-final position. This fact suggests that the progressive is characterized by having a bimorphemic negation *-si-...-i*. We shall now consider negative imperative.

In Junod (1933:33) **negative imperative** is presented as shown below.

- (22) *mi- nga- man- i*
 2PL SM NEG find IMP
 ‘Do not find’

In the example, the negative markers */-nga-/* is placed after the subject marker (you) and the imperative marker is *-i* at the final position. We expect this morpheme to be *-e*. However it should be observed that *-e* does occur when the formative *-ni* of the imperative plural occurs at the post-final position when the subject marker is in plural form. An appropriate example should be as illustrated in (23).

- (23) *mi- nga- man- e- ni*
 2PL SM NEG find IMP PL
 ‘Do not find’

After the review of Junod’s (1933) work on tense and negation, the next subsection examines Santos’ (1941) work.

2.3.3 Luiz Feliciano dos Santos

Santos (1941), in *Gramática da Língua Chope*, argues that it is impossible to establish paradigms of the verb conjugation in Copi because of the wide variations of verb forms. However, based on Portuguese grammar, he sets out fourteen conjugations: two presents (present present, and narrative present); four pasts (imperfect, simple perfect, compound perfect, pluperfect); two futures (simple future, and compound future); two conditionals (simple conditional, and compound conditional); potential; imperative; optative; gerund; and past participle. Nevertheless, some of these terminologies are not appropriate for a Bantu language. Consider the following examples taken from Santos (1941:168).

- (24) a. **compound perfect:** *Ni- tanga- rand- a*
 1SG SM PST love FV
 ‘I have loved’
- b. **gerund:** *Ni- tchi- rand- a*
 1SG SM TM love FV
 ‘loving I’
- c. **past participle:** *Ni- di- rand- ile*
 1SG SM TM love TM
 ‘loved I’

From the examples in (24), is evident that to the verb *ku-randa* ‘to love’ in (24a) is attached to the tense prefix *-tanga-*, used to signalize a distant past. However, in the sentence there is only a single verb and not a compound. The second observation is that the tense marker *-tchi-* in (24b) may be seen as conditional marker *-ci-* ‘if’ instead of gerund form. Bantu languages do not have gerund. Finally, in (24c), rather than participle, a bimorphemic tense marker is seen: *-di-...-ile*. While the former may be regarded as a conditional, the latter locates the action in the past time. To make these observations clear, the examples in (25) should be considered.

- (25) a. remote past: *Ni- tanga- rand- a*
 1SG SM TM love FV
 ‘I loved long ago’
- b. conditional: *Ni- ci- rand- a*
 1SG SM COND love FV
 ‘if I love’

- c. past conditional: *Ni- di- rand- ile*
 1SG SM COND love PST
 ‘I would have loved’

As we shall see in Chapter Four, there are different kinds of past and conditional in Cilenge. In the next subsection, we consider tense.

2.3.3.1 Tense

According to Santos (1941:171) there are five signs of **past tense**: *-ile* as a general form; *-ite* applied with monosyllabic stems; *-te* occurring with verbs ending in *-ela/-ala*; *-i* when the verb ends with *-na* or *-nga*. The fifth sign *-de* is applied indistinctly for all contexts of past in the north Inharrime. Consider the examples from Santos (1941: 170 and 171).

- (26) a. general form: *ni- rand- ile*
 1SG SM love PST
 ‘I loved’

In (26a) the author does not explain what “general form” means, and thus it is not easy to present any generalization. However, as will be discussed in Chapter Four, */-ile/* mainly occurs according to the radical last consonant.

- b. monosyllabic stem: *ene a- p- ite*
 he/she 2SM steal PST
 ‘he/she stole’

Although */-ite/* occurs only with monosyllabic stems as in (26b), exceptionally the verb *ku-ta* ‘to come’, with monosyllabic stem *-ta*, selects the form */-ile/*. This behavior appears to be linked to the kind of the root consonant.

- c. verbs ending in *-ela/-ala*: *-di(l)- te* (from *Kudila* ‘to cry’)
 cry PST
 ‘have/has cried’

While analysing the past tense in (26c) *-di-te* ‘cried’, from the verb *-dila* ‘cry’, it seems that the alveolar */l/* was suppressed. However, as discussed in Chapter Four, besides

ela/ala ending, different verb endings, like *ku-daya* ‘to kill’, share the same form */-te/* in the past. Hence further analyses are required.

- d. verbs ending in *-na* or *-nga*: *ni- mu- dhan- e*
 1SG SM 1OM call PST
 ‘I called him’

The example in (26d) suggests that the last consonant */n/* of the verb *-dhana* ‘call’ selects *-e/i*.

Santos’ (1941) work suggests that more studies on tense markers in Copi are needed. For example, why do similar endings occur with different tense markers and what is the suitable label for multiple tenses in that language. Now we consider negation.

2.3.3.2 Negation

Santos (1941:179–188) states that negative formatives differ according to where the Copi group is situated. The main strategy of negation presented by this author consists of negative prefixes as pre-initial or post-initials. Consider the following examples taken from Santos (1941:179).

- (27) a. *a- ni- rand- i*
 NEG1 1SG SM love NEG2
 ‘I do not love’
- b. *a- ni- khal- i ku- uon-a*
 NEG1 1SG SM have NEG2 15 see FV
 ‘I have not seen’

According to the author, the negative formative */a-/* is employed only with **negative present**, as in (27a) and in (27b). Looking carefully at the examples, one may notice that there is a second negative formative, the final */-i/* attached to the root *-rand-* ‘love’ and to the auxiliary verb *-khala* ‘to have’. It should be concluded that negative present holds double negation: Neg1 (*a-*) and Neg2 (*-i*), the former as pre-initial and the latter as final.

Santos (1941:179) says that the negative prefix *-nga-* is employed with the present, imperfect, perfect, pluperfect and imperative. Consider the following examples.

- (28) a. negative present: *ni- nga- rand- i*
 1SG SM NEG1 love NEG2
 'I do not love'

In (28a) we notice two negative formatives: the prefix *-nga-* and the suffix *-i*. Thus, it is also an example of double negation instead of single negation. The author neither differentiates the present form in (28a) from that in (27a) above nor explains when to use */-nga-/* instead of */a-/*.

- b. negative imperfect: *ni- nga- ti- si- rand- i*
 1SG SM NEG1 TM NEG1 love NEG2
 'I was not loving'

The example in (28b) shows three negative formatives, one (*/-nga-/*) following the subject marker, the second (*/-si-/*) adjacent to the verb root and the third (*/-i/*) at the final. This fact suggests the occurrence of triple negation in negative imperfect.

- c. negative perfect: *ni- nga- rand- a*
 1SG SM NEG love FV
 'I did not love'

The prefix */-nga-/* in (28c) is the unique negative formative. This is in accordance with Santos' statement.

- d. negative pluperfect: *ni- nga- ti- sa- rand- a*
 1SG SM NEG1 TM NEG1 love FV
 'I had not loved'

Negative pluperfect in (28d) is characterized by having two negative formatives: */-nga-/* and */-sa-/* both as prefixes.

- e. negative imperative: *u- nga- rand- e*
 2SG SM NEG love IMP
 'Do not love'

As in negative perfect above, negative imperative in (28e) only bears */-nga-/* as negative formative. The data suggest that negative prefix */-nga-/* is only employed with perfect and imperative.

It appears that Santos does not focus on the occurrence of multiple negation and negative suffixes, as observed in present (28a), imperfect (28b) and pluperfect (28d),

where the negative prefix /-*nga*-/ is accompanied by one or two other affixes. After the review on Santos' work, we turn to Bailey.

2.3.4 Richard Anthony Bailey

2.3.4.1 Tense

In his work entitled *Copi phonology and morphotonology*, Bailey (1976:61-77) identifies the following twelve (affirmative) tenses, namely "scarcely had I/he ... etc"; perfect tense; future tense; imperfect continuous; present continuous tense; potential; conditional based on /-ci-/; conditional based on /-co-/; participial sub-mood; hortative; tense expressing "as soon as"; aorist tense. It should be noted that the author does not present any definition of each one of these labels of tenses. The following examples taken from Bailey (1976) attempt to illustrate these tenses.

- [illegible]

Although Bailey does not make any reference to tense marker(s), it should be observed that /-*to*-/ and /-*so*-/ are tense markers attached to the verb *-maha* ‘to make’. The former locates the action in the past time and it expresses exclusion, i.e. not more than that action; the latter is an emphatic expression. Thus, as will be discussed in Chapter Four, it should be considered as **exclusive emphatic past** whose gloss should be as "they really have made".

- (30) **Perfect:** *ni- mah- ile*
 1SG SM make TM
 ‘I have made’

In this example, the perfect tense marker is */-ile/*. Contrary to Santos (1941), Bailey (1976) does not discuss the allomorphs of perfect seen in Copi.

- (31) **Future:** *hi- na- lw- a*
 1PL SM FUT fight FV
 ‘we shall fight’

The prefix /-*na*-/ in (31) expresses the future tense marker following the subject marker. It seems that in Bailey (1976) it is not foreseen distant or anterior future as discussed in subsection 2.3.2.1 above.

- (32) **Imperfect Continuous:** *ni- ti- ti- mah- a*
 1SG SM TM TM make FV
 ‘I was making’

Although no additional information is given in Bailey (1976) on imperfect continuous, one may notice that it seems to describe an event being taken up over certain time and it bears two simultaneous tense markers */-ti-, -ti-/*. However, one of these can be elided, as will be seen later in Chapter Four.

- (33) **Imperfect:** *a- ti- lw- a*
 1SM TM fight FV
 ‘He was fighting’

As seen, imperfect shows a single tense marker */-ti-/* with the same information as in (32). It seems that one */-ti-/* or two */-ti-, -ti-/* do not change anything on meaning.

- (34) **Present continuous:** *ni-* *o-* *thav-* *a*
 1SG SM TM fear FV
 ‘I am fearing’

In the example in (34) the tense marker is /-o-/ and it follows the subject marker. The continuous tense expresses that the action or state is still going on. As detailed in Chapter Four, it should be observed that subject and tense markers appear bounded together as *no-*.

- (35) **Potential:** *hi- nga- won- a*
 1PL SM TM see FV
 ‘we can see’

In (35) the potentiality, i. e. the ability, capacity or tendency is presented by the tense marker */-nga-/*.

- (36) a. **conditional based on /-co-/:** *ni- co- t- a*
1SG SM TM come FV
'if I come'
- b. **conditional based on /-ci-/:** *ni- ci- lw- a*
1SG SM TM fight FV
'if I fight'

As there is no difference in Bailey's (1976:63 and 66) glosses, it appears that, semantically, the two kinds of conditional in (36a) and (36b) are identical and an explanation about when to use which one could be helpful. This gap reveals that more must be done for a clear understanding of the matter.

- (37) **Participial sub-mood:** *ní- heleket- a*
 1SG SM accompany FV
 'and then I accompany'

Taking into account the gloss "and then", it seems that the author refers to a posterior event. Although there is no tense affix, the behaviour of tone (the subject marker bears a high tone) reveals that the action took place in the past, and thus it should be labelled narrative past: 'and then I accompanied'.

- (38) Tense expressing "as soon as": *a- ca- nga- dy- a*
 1SM TM TM eat FV
 'as soon as he eats'

As in previous examples, in (38) Bailey (1976:67) does not display the composition of the verb complex and has been limited to an occasional meaning for classifying the tense. Here we can observe that two tense markers are prefixed to the verb *-dya* 'to eat'; while the morpheme */-ca-/* is related to the conditional, the morpheme */-nga-/* denotes potentiality. Thus, the label should be conditional potential: "since he eats".

- (39) **Aorist tense:** *a- ta- nga- lw- a*
 1SM TM TM fight FV
 'he fought'

Although Bailey (1976:71) identifies a compound prefix */-ta- -nga-/* in (39), it appears that the term "aorist" he uses is misleading here, because this example displays remoteness. **Aorist** "denotes that the action took place in the past, but is indefinite as to the exact time" (Doke 1935:51). On the contrary, in (39) it is clear that the action took place many years ago. An alternative is presented in (39').

- (39') Remote past: *a- ta- nga- lw- a*
 1SM TM TM fight FV
 'he fought long [years] ago'

- (40) **Hortative:** *ni- na- lw- e*
 1SG SM TM fight TM
 ‘let me fight’

As encouraging or urging modality, according to Bailey, the hortative is expressed by the tense prefix */-na-/*. However, it should be noted that there are two tense markers, namely */-na-/* and */-e/*. The former denotes future action and the latter indicates hortative.

As we shall see in Chapter three, Bailey’s (1976) work brings a fresh look to the Copi group, because it reveals that the kind of the tone involved in the stem exerts an important role in tense formation. Now we turn to the negation form.

2.3.4.2 Negation

When describing the phonology of verbs in Copi, Bailey (1976:63–75) gives examples of negation in some tenses. However, the nature and the positioning of the negative formatives are not shown in many instances. Moreover, when the negative formative stands out in some instances it is not clear when that morpheme must be in pre-initial or post-initial. Consider the examples below taken from Bailey (1976:72).

- (41) **Present tense negative:** a. *va- kha- won- i*
 2SM NEG1 see NEG2
 ‘they do not see’
- b. *kha- va- won- i*
 NEG1 2SM see NEG2
 ‘they do not see’

In the examples in (41) we see the same negative formative, either as post-initial negative marker */-kha-/* in (41a) or as pre-initial negative marker */kha-/* in (41b), but no details are given in relation to the different positionings. It should be observed that the “present tense negative” is particularised by having two negative morphemes: */kha-/* as Neg1 and */-i/* as Neg2.

- (42) **Perfect tense negative:** *a- kha- won- a*
 1SM NEG see FV
 ‘he did not see’

Contrary to present, perfect tense negative in (42) bears only the prefix */-kha-/* following the subject marker.

Bailey (1976:75) has identified what he labels as the “**imperfect negative** prefix compound /-*nga-ti-si*/”, as illustrated in (43).

- (43) **imperfect negative:** *a-* *nga-* *tí-* *si-* *kwamul-* *i*
 1SM NEG1 NEG1 NEG1 strip bark NEG2
 ‘he was not stripping bark’

From the example in (43), it seems that /-*ti*-/ is a tense marker as seen in the affirmative tense in (33) above. Instead of three prefixes as negative formatives, the facts suggest the following affixes: prefix /-*nga*-/ preceding the tense marker /-*ti*-/; prefix /-*si*-/ adjacent to the root verb and the suffix /-*i*/. Thus in (43) we can see triple negation: Neg1 /-*nga*-/, Neg1 /-*si*-/, Neg2 /-*i*/. In the next section we consider Nhantumbo’s work.

2.3.5 Nelsa Nhantumbo

In the article *Morfofonologia da marca do passado na língua Copi*, Nhantumbo (2009:127-135) presents a brief description on past tense in the Copi language. Based on the lexical phonology and morphology theory, this author discusses the various realizations of the past tense marker /*-*id-e*/ (of proto-Bantu), specifically the allomorphic variation of /-*il-e*/ and /-*it-e*/.

2.3.5.1 Tense

Nhantumbo (2009:131) identifies the following two present tenses: (i) present progressive, marked by the morpheme /-*o*-/, and (ii) present habitual expressed by the morpheme /-*a*-/, as illustrated in (44) below.

- (44) a. *ani* *ni-* *o-* *dy-* *a* *di-pawa*
 I 1SG SM TM eat FV 5-bread
 ‘I am eating bread’
- b. *ani* *ni-* *a-* *dy-* *a* *di-pawa*
 I 1SG SM TM eat FV 5-bread
 ‘I eat bread’

While in Junod (1933) are identified three kinds of present, as already seen in subsection 2.3.2.1, in Nhantumbo (2009) are considered only two tense markers of present in Copi. She does not consider the present tense characterized by zero (Ø) tense marker, as seen in (9c) above. As for the example (44a), it should be observed that the

action expressed by the verb may be viewed as an exclusion of any other action, i.e. just eating bread and nothing else. From this point of view the idea of action in progress does not appear and thus might be considered as exclusive present.

Regarding the future tense in Copi, the author identifies the near future expressed by /-*na*-/ and the distant future indicated by /-*nata*-/. Consider the examples from Nhantumbo (2009:132).

- (45) a. *ani* *ni-* *na-* *dy-* *a* *ndiwo*
 I 1SG SM FUT eat FV 3food
 ‘I shall eat food’
- b. *ani* *ni-* *nata-* *dy-* *a* *ndiwo*
 I 1SG SM TM eat FV 3food
 ‘I am to eat food’

As it will be detailed in Chapter Four, it seems that distant future in (45b) is formed by two tense markers: /-*na*-/ and /-*ta*-/, as suggested in (45’).

- (45’) *ani* *ni-* *na-* *ta-* *dy-* *a* *ndiwo*
 I 1SG SM TM TM eat FV 3food
 ‘I am to eat food’

The first morpheme /-*na*-/ locates the action in a future time while /-*ta*-/ is considered as ventive form (the itive is /-*ya*-/) and it means “later”.

In relation to the main topic of the article, consider the following examples of past tense taken from Nhantumbo (2009:132).

- (46) a. *nyanowa* *ni-* *bhik-* *ile* *m’-pawu*
 LOC yesterday 1SG SM COOK PST 3-cassava
 ‘yesterday I have cooked cassava’
- b. *nyanowa* *ni-* *ti-* *bhik-* *ile* *m’-pawu*
 LOC yesterday 1SG SM TM cook TM 3-cassava
 ‘yesterday I had cooked cassava’
- c. *kale,* *ni-* *ti-* *bhik-* *a* *m’-pawu*
 LOC long ago 1SG SM TM cook FV
 ‘long ago, I was cooking cassava’

According to this author, in (46a) */-ile/* (with *-ite* as allomorph) expresses the recent past, whereas the discontinuous morpheme */-ti-, -ile/* in (46b) is related to remote past. However, the latter seems to express anteriority, i.e. denotes that one action took place shortly before the other one rather than remoteness. Therefore, it should be labelled relative past.

For Nhantumbo (2009) there are two allomorphs of the past tense (*/-ile/* and */-ite/*), while in Santos (1941) are seen five allomorphs, as already discussed in 2.3.3.1 above. This fact suggests that further studies may be done on past tense in Copi.

On the other hand, when considering */-ti-, -ile/* as a remote past tense marker, she puts aside construction with */-ta-, -nga-/* which by itself means “long time ago” as suggested in Bailey (1976). Now we consider the negation.

2.3.5.2 Negation

Nhamtumbo (2009:131-2) claims that negation markers always occur as prefixes at post-initial in present, future and past. However, as illustrated below in (47), a suffix negative formative may occur too.

- (47) a. Present: *ani ni- ka- dy- i di-pawa*
 I 1SG SM NEG1 eat NEG2 5-bread
 ‘I do not eat bread’
- b. Future: *ani ni- na- mbi- dy- a ndiwo*
 I 1SG SM FUT NEG eat FV 3food
 ‘I shall not eat food’
- c. Past: *nyanowa ni- ya- bhik- a m'-pawu*
 LOC yesterday 1SG SM NEG cook FV 3-cassava
 ‘yesterday I did not cook cassava’

As seen, in (47a) two negation markers are used for expressing negative present tense: the prefix */-ka-/* following the subject marker and the suffix */-i/* following the root verb */-dy-/* ‘eat’.

The works reviewed here suggest that in Copi there are three strategies of negation, namely (i) single negation consisting of one pre-initial or post-initial, double negation, one as prefix (at pre-initial or post-initial position) and the second as suffix, and (iii) triple negation expressed by two prefixes and one suffix. As we shall see in Chapter Four, Cilenge uses two strategies: single negation with one post-initial prefix or final suffix, and double negation formed by one post-initial prefix and a final suffix. In the next section, we consider early studies on tense and negation in Cilenge.

2.4 Early studies on tense and negation in Cilenge

As mentioned in section 1.5, Cilenge has not been described adequately. As a result, the only work we could find on this language is *A vocabulary with a short grammar of Xilenge, the language of people commonly called Chopi, spoken on the East Coast of Africa between the Limpopo River and Inhambane* by William Edmund Smyth, John Matthews (1902). This work focuses on tense and negation. We start our review with the tense.

2.4.1 Early studies on tense

One thing that is clear from Smyth & Matthews (1902) is that their taxonomy of tenses in Cilenge is informed and inspired by what they find in European languages, as already referred to in section 1.2. The authors present paradigms of verb conjugations in columns where the following tenses are seen:

(a) Indefinite tense:

- (48) *ni- von- a*
 1SG SM see FV
 ‘I see’

According to these authors, indefinite tense is largely used in asking questions or when the idea of time is not specially marked. As the gloss suggests, it should be labelled unmarked present tense. As already observed in subsection 2.3.2.1, there is a present tense characterized by zero (Ø) tense marker.

(b) "Ta" purpose tense

- (49) *ni- ta- von- a*
 1SG SM TM see FV
 ‘that I may see’

From the example in (49), it seems that the label is merely given based on the tense marker */-ta-/*, which may be considered ventive form, as already referred to in subsection 2.3.5. Furthermore Smyth & Matthews (1902:41) recognize that “the prefixes *-ta-* and *-ya-* still retain some trace of the meaning “come” and “go”. In this context, an appropriate example is suggested in (49’).

- (49’) present (progressive): *ni- ta- von- a*
 1SG SM TM see FV
 ‘I am coming [here] to see’

(c) **"Ya" purpose tense**

- (50) *ni- ya- von- a*
 1SG SM TM see FV
 ‘that I may see’

The example in (50) is only differentiated from that in (49) by the tense marker */-ya-/*. This morpheme may be considered as an itive form of present progressive. A proper gloss should be as follows in (50’).

- (50’) present (progressive): *ni- ya- von- a*
 1SG SM TM see FV
 ‘I am going [there] to see’

(d) **Conditional**

- (51) *ni- nganda- von- a*
 1SG SM TM see FV
 ‘I may or should see’

As the gloss itself suggests, the action is taken as a probability in a future time and the example should then be viewed as potential rather than conditional, as suggested below.

- (52) *ni- nganda- tsul- a loko ni- ci- man- a male*
 1SG SM POT/FUT go FV if 1SG SM COND find FV 9 money
 ‘I probably can go if I find money’

(e) **Consecutive**

- (53) *ni- ci- von- a*
 1SG SM TM see FV
 ‘If I see’

In this manner, the example in (53) suggests the conditional. As will be seen in Chapter Four, in Cilenge the conditional is mainly expressed by */-ci-/*. The consecutive construction involves a sequence of tenses (see Doke 1935:77), and a suitable example, taken from Smyth & Matthews (1902:41), is presented below.

- (54) *gon- a kuva ni- ci- ku- von- a*
 come IMP for 1SG SM TM 1SG OM see FV
 ‘Come that I may see you’

(f) **"To" tense**

- (55) *ni- to- von- a*
 1SG SM TM see FV
 ‘I did see (?)’

The tense marker */-to-/* appears to be used for labelling the tense. It should be observed that the question mark (?) seen in Smyth & Matthews’ (1902:34) gloss suggests a doubt on the proper taxonomy. As we shall see in Chapter Four, the example in (55) expresses the exclusive past (it excludes any other possible action) and the gloss should be ‘I have only seen’.

(g) **Imperfect**

- (56) *ni- tidi- von- a*
 1SG SM TM see FV
 ‘I was seeing’

According to the authors, the imperfect tense marker is */-tidi-/*, following the subject. However, as we shall see in Chapter Three, it seems that there is an object marker *-di-* (cl 5) attached to the verb *-vona* ‘see’. To avoid confusion, it is proposed in (56’) as an adequate gloss.

- (56’) *ni- ti- di- von- a*
 1SG SM TM 5OM see FV
 ‘I was seeing it’

(h) **Past**

- (57) *ni- ti- von- a*
 1SG SM TM see FV
 ‘I saw’

It appears that there is no relation between the designation ‘past’ and the example presented in (57). As already noted, the past tense, as in Cilenge too, is characterized by /-ile/, /-ite/ or /-i/ in the final position. On the contrary, in (57) the tense marker /-ti-/ appears before the root expressing the imperfect tense, as in (56’) above.

(i) **Pluperfect**

- (58) *ni- ti- von- ile*
 1SG SM TM see TM
 ‘I had seen’

As characteristic of pluperfect, the example in (58) comprehends two tense markers, one as prefix (/ti-/) and the second as suffix (/ile/). However, as we shall see in Chapter Four, in Cilenge, when the verb ends with the alveolar nasal /n/, as is the case in (58), the tense suffix /-i/ is employed.

(j) **Perfect**

- (59) *ni- von- ile*
 1SG SM see TM
 ‘I have seen’

The tense marker is the suffix /-ile/, following the root verb -von- ‘see’. As already referred to, an appropriate suffix should be /-i/, because of the kind of the last consonant of the verb root.

(k) **“Already” tense**

- (60) *se- ni- von- ile*
 TM 1SG SM see TM
 ‘I have already seen’

According to Smyth & Matthews (1902:38), the tense prefix is /se-/, before personal prefix /-ni-/ of verb in perfect form /-vonile/ ‘have seen’. However, looking closely to the example, one may notice that /se/ ‘already’ may be seen as an adverb rather than a tense marker, and thus it does not belong to the verb complex. The facts suggest that we are in the presence of perfect as in (59) above.

(l) **“Just” tense**

- (61) *ni- kungadiku- von- a*
 1SG SM TM see FV
 ‘I have just seen’

The authors consider “*kungadiku*” as the tense marker of the so-called “Just” tense. On the contrary, the data suggest the presence of a periphrastic construction where the auxiliary verb is *kungadi* ‘to be just’ and the main is *kuvona* ‘to see’. It should be labelled periphrastic past tense, as proposed in (62) below.

- (62) *ni- ngadi ku- von- a*
 1SG SM be just 1S see FV
 ‘I have just seen’

The auxiliary is inflected simply by prefixes and the main verb remains in the infinitive form.

(m) **“Still” tense (compound tense)**

- (63) *ni- ngadi ni- ci- von- a*
 1SG SM be still 1SG SM TM see FV
 ‘I still see’

The example in (63) presents two verbs: the auxiliary *kungadi* ‘to be still’ and the main verb *kuvona* ‘to see’. This construction should be considered periphrastic present tense. Here either the auxiliary or the main verbs both are inflected.

(n) **Future**

- (64) *hi- na- von- a*
 1PL SM TM see FV
 ‘we shall see’

The tense marker */-na-/* follows the subject marker. As we shall see in Chapter Four, in Cilenge there are close and distant futures. The instance in (64) only refers to the close future.

(o) **Present**

- (65) *n(i)- a- von- a*
 1SG SM TM see FV
 ‘I do see’

In the instance in (65) the tense marker is the prefix */-a-/* following the subject marker */ni-/* which the vowel */i/* drops when it is in contact with the vowel */a/*, as already observed. Although Smyth & Matthews (1902:28) identify this present tense, in Chapter Four we shall see four types of present in Cilenge.

After this review on tense markers in Cilenge, the next subsection will focus on negation.

2.4.2 Early studies on negation

While presenting paradigms of verb forms, Smyth & Matthews (1902) give the following conjugations of negative.

(a) Present negative

- (66) *a- ni- von- i*
 NEG 1SG SM see NEG
 ‘I do not see’

In this example, the negation is expressed by two negative formatives: the prefix /*a-*/ preceding the subject marker and the final /*-i*/. However, as we shall see in Chapter Four, Cilenge does not have any pre-initial negative prefix. Here the negative prefix should be /*-ka-*/, following the subject marker, as illustrated below.

- (67) *ni- ka- won- i*
 1SG SM NEG1 see NEG2
 ‘I do not see’

(b) Perfect negative

- (68) *a- ni- nga- von- a*
 NEG 1SG SM NEG see FV
 ‘I have not seen’

From the example, we may observe that to the verb *-vona* ‘see’ are attached the following negative affixes: /*a-*/ before the subject marker, and /*-nga-*/ following the subject marker. As already observed, no pre-verbal negation marker is allowed in Cilenge. As will be seen later, in this language the past perfect has a single post-initial negation marker, as in the following example.

- (69) *ni- ya- won- a*
 1SG SM NEG see FV
 ‘I have not seen’

(c) **Future negative**

- (70) a. *a- ni- naku- von- a*
 NEG 1SG SM TM see FV
 ‘I shall not see’
- b. *ni- nga- naku- von- a*
 1SG SM NEG TM see FV
 ‘I shall not see’

According to Smyth & Matthews (1902:31), in (70a) /*a-*/ is a negative prefix preceding the subject marker and /*-naku-*/ is a tense marker. As observed earlier, pre-initial negative marker does not occur in Cilenge. Furthermore in “*naku*” are seen two morphemes: the future tense marker /*-na-*/ belonging to the copula *kuva* ‘to be’, and the infinitive marker /*ku-*/ of the regular *kuvona* ‘to see’. The example below aims to illustrate this.

- (71) *ni- ka- na ku- von- a*
 1SG SM NEG FUT 15 see FV
 ‘I will not be to see’

Although no difference between (70a) and (70b) is presented by the authors, looking closely at (70b), we can identify the negative prefix /*-nga-*/ following the subject marker, the future tense marker /*-na-*/ of the copula *kuva* ‘to be’ and the infinite marker /*ku-*/ of the verb *kuvona* ‘to see’.

The strategies seen in Smyth & Matthews (1902) only partially reflect how Cilenge employs morphemes of negation. Considering the foregoing observations, the question remains as to what needs to be done on negation in Cilenge.

2.5 Summary

In this chapter earlier works on negation and tense markers in general and in Copi and Cilenge in particular were reviewed and aspects of the verb structure were explored. The essential idea is that there is not one structure suitable for all Bantu languages and the varied structures are related to different languages or perspectives of analysis, which raises various taxonomies. The literature review not only has showed different types and strategies of negation and tense marking and their relationship with morphology,

phonology and syntax, but it also has presented multiple taxonomies on Bantu languages based on descriptions employed for European languages.

In the next chapter, attention will be turned to the general description of Cilenge, focusing on phonetics, phonology, noun classes and verb morphology.

Chapter Three: Basic Structure of Cilenge

3.0 Introduction

The previous chapter presented a literature review of the studies on negation and tense markers in general and in Copi and Cilenge in particular. The literature review has confirmed what was stated earlier in this study, namely that there is a paucity of studies on Cilenge.

This chapter provides the basic structure of Cilenge. This is relevant here because structures such as the noun class system, particularly the noun class prefixes, have a bearing on every structure in this language, including negation and tense markers. Specifically, the description of the basic structure of Cilenge will be conducted as follows. Section 3.1 presents the sound system of Cilenge: 3.1.1 vowels and phonological processes for disrupting the sequence of vowels; 3.1.2 consonants and some phonetic factors that affect it; 3.1.3 tone in the verb complex; 3.1.4 syllable structure, focusing on the onset and syllabic consonant. Section 3.2 discusses the Cilenge noun classes and Section 3.3 describes the Cilenge verb structure and examines the positioning of tense and negation affixes, followed by the summary.

3.1 The sound system

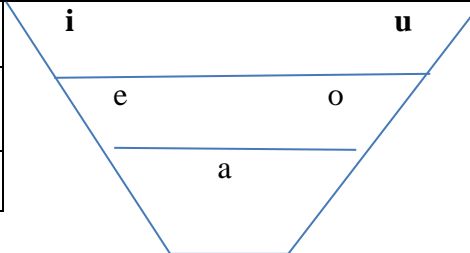
The Cilenge sound system consists of vowels and consonants (including two semi-vowels). Cilenge has a tone system, with two basic tones (high and low).

3.1.1 Vowels

Cilenge has a five-vowel system consisting of front closed /i/, back closed /u/, front half-open /e/, back half-open /o/ and central open /a/, as shown in Table 1. Vowels are affected by certain phonological processes, which may help explain why some morphemes are realized in the verb complex, such as negation and tense markers realized as simply *e* and *n*, respectively. Thus, it seems useful to provide some brief notes on the Cilenge vowel system.

Table 1: vowel
system of Cilenge

	Front	Central	Back
High: closed	i		u
Mid: half-open	e		o
Low: open	a		



Consider the following examples, where the right side shows how the constructions on the left side are produced.

- (72) a. *ku- em- a* > *kw- em- a*
15 wait FV 15 wait FV
'to wait' 'to wait'
- b. *va- na- em- a* > *va- n- em- a*
2SM FUT wait FV 2SM FUT wait FV
'they shall wait' 'they shall wait'
- c. *hi- lav- i mati* > *hi- l- e mati*
1PL SM want NEG 6 water 1PL SM want NEG 6 water
"we do not want water" "we do not want water"

The example in (72a) shows that the semi-vowel /w/ is obtained from the gliding process: the high vowel /u/ changes to /w/ when it precedes /e/ or other different vowels. In Cilenge the high vowels /u/ and /i/ become glides /w/ or /y/, respectively, before non-identical vowels: *u - a* > *w - a*; *i - a* > *y - a*.

In (72b) is shown that the low vowel /a/ in /-na-/ is deleted as it comes in contact with the mid vowel /e/ of the verb -ema 'wait', and then the tense marker is apparently -n-. In Cilenge elision involves only deletion of high and low vowels when in contact with any vowel: *a - e* > *Ø - e*; *a - i* > *a - Ø*.

In (72c), the consonant /v/ of the root *-lav-* ‘want’ is elided and the sequence of vowels /a/ and /i/ follows. As a result, the two coalesce to /e/, which gives rise to apparent root *-l-* ‘want’, and negation marker *-e*, at the surface realization. This phenomenon of coalescence is also known either as fusion (cf. Contreras 1969:60; Schram & Pike 1978:257; Ngunga 2000:21) or vowel assimilation (cf. Meinhof & Van Warmelo 1932:24, 167). In Cilenge, only /i/, /u/ and /a/ can coalesce as follows:

$i + i = i$; $a + a = a$; $a + i = e$; $a + u = o$.

As already seen, in Cilenge there are phonological rules applied to avoid vowel sequences in the verb complex. Apart from coalescence, gliding and elision, there is another strategy used for disrupting a sequence of vowels, the insertion of the semi-vowel /y/ between two vowels: $i - e > i-y-e$; $a - a > a-y-a$. The examples below aim to illustrate this.

- (73) a. *ci- em- ile ci- bhomba* > *ci- yem- ile ci- bhomba*
 7 SM stop PST 7 bus 7 SM stop PST 7 bus
 ‘the bus stopped’ ‘the bus stopped’
- b. *va- na- ambal- a* > *va- na- yambal- a*
 2SM FUT wear FV 2SM FUT wear FV
 ‘they shall wear’ ‘they shall wear’

The example in (73) shows the insertion of the semi-vowel /y/ between two vowels in the verb complex. In (73a) the insertion is between the subject marker /*ci-*/ and the root /*-em-*/ ‘stop’, and in (73b) it is between the tense marker /*-na-*/ and the root /*-ambal-*/ ‘wear’.

As will be seen later, Cilenge displays open syllables, as they end in a vowel sound, with CV- structure. In this structure, C refers to the initial part of the syllable and it is called onset, always represented by a consonant or consonant cluster, and V refers to the nucleus and it is formed by a vowel. To conform to Cilenge syllable structure, four phonological processes for resolving vowel hiatus are employed: (i) insertion of the semi-vowel /y/, as illustrated in (73); (ii) deletion of high and low vowels, as shown in (72b); (iii) coalescence, a fusion of two vowels resulting in a new form, as seen in (72c), and gliding of high vowels to y or w, as observed in (72a).

After this brief description of the vowel system and the phonological processes in which they are involved in Cilenge, the next subsection will focus on the consonant system.

3.1.2 Consonants

Cilenge has thirty-eight consonants as shown in Table 2. The consonant system presents a larger variety of phonemes, such as plosives, implosives, affricates, fricatives, nasals, lateral, vibrant and approximants. Many characters presented in the table below may occur in an environment of consonant cluster, mainly by means of pre-nasalization, aspiration and gliding.

Table 2: The consonants of Cilenge

Manner/place	bilab.	labiodent	alveolar	lateral	palatal	velar	click	Glottal
Plosive								
Voiceless	p		t			k		
Voiced	bh		dh		j	g		
Implosive								
Voiceless							q [ʔ], qh [ʔʰ]	
Voiced	b[ɓ]		d[d̪]				gq [gʔ]	
Affricate								
Voiceless	ps	pf	ts		c			
Voiced	bz	bv	dz					
Fricative								
Voiceless		f	s, sw	hl [ɬ]	x			[h]
Voiced		vh	z, zw	lh [ɮ]	xj			
Nasal	m		n		ny [ɲ]	n' [ŋ]	n'q [ŋʔ]	
Lateral			l					
Vibrant			r					
Approximant		v [ʋ]	w		y			

In this table, vertical columns represent the place of articulation of the consonants and horizontal columns indicate the manner of articulation. As mentioned earlier, the place

and manner of articulation may be affected by phonetic factors. Some remarks on vertical columns are presented below.

(a) **Bilabial**

The following examples indicate the occurrence of bilabial consonants in Cilenge.

- (74) a. *Maceka* *a-* ***p-*** *ite* *nyama*
 1 PN 1SM steal PST 9 meat
 ‘Maceka has stolen meat’
- b. *ku-* ***phamel-*** *a*
 15 dish FV
 ‘to dish’
- c. *Va-anana* *va-* *lav-* *a* ***mpondo***
 2-child 2SM need FV 3 vaccine
 ‘Children need vaccine’
- d. *Ni-* ***pwat-*** *a* *male*
 1SG SM be in want FV 9 money
 ‘I am in want of money’

The examples in (74) show that the plosive /p/ may appear as non-aspirated [p] as in (74a), aspirated [p^h] as in (74b), pre-nasalized [ʰp] as in (74c) and velarized (p^w) as in (74d). It should be observed that aspiration occurs in voiceless [p]. Aspiration in Cilenge is not predictable and can be contrastive. The contrast extends to nasal stop, producing breathy voiced nasal [m^h], as seen below.

- (75) a. ***mamba*** ‘mamba (snake)’
 mhamba ‘preyer’
- b. ***-pala*** ‘defeat’
 -phala ‘dig’ (as cows)

- (76) a. *Mame* *a-* ***bhik-*** *a* *nyama*
 1 mother 1SM cook FV 9 meat
 ‘Mother is cooking meat’
- b. *Tate* *a-* ***bik-*** *a* *mahungu*
 1 father 1SM announce FV 6 information
 ‘Father is announcing information’

The examples suggest that the plosive /b/, in (76a) appears orthographically as **bh** in contrast with the implosive [ɓ], the common **b** in orthography, in (76b). In this case, the letter "h" serves only to contrast the plosive and implosive, as illustrated by the minimal pairs.

(b) Labiodental

The examples below show the occurrence of labiodental consonants in Cilenge.

- (77)
- a. *Di-jaha di- **vh**ilek- ile*
 5-man 5-SM be idiot PST
 'The man is an idiot'
 - b. *Di-jaha di-vandz- a di-dimwa*
 5-man 5-peel FV 5-orange
 'The man is peeling an orange'
 - c. *M va-lenge > Mba- lenge*
 be 2-Lenge "It is Lenge people"

In the example in (77a) the letter "h" is employed for distinguishing the fricative /v/, written **vh**, from the approximant /ʋ/, written **v**, in (77b). The example in (77c) indicates a nominal predicative case, i.e., when the nasal verbal copula (which may be translated as "to be" or "there to be") is prefixed to the noun prefix /va-/, the approximant /ʋ/ becomes /b/: **v** > b. Bailey (1976:50) considers this verbal copulative as identificative copulative which forms are /N/ and /I/. The nasal occurs with NP of classes 2, 5, 7, 8, 9, 10, 11, 14 and 15. It should be observed that the nasal verbal copula is assimilated to the manner of articulation of the following consonant: *M* before /v/ and /w/; *N* before other consonants.

(c) Alveolar

The following examples present the occurrence of alveolar consonants in Cilenge.

- (78)
- a. *Si- haka si- a- **dh**ul- a*
 8-fish 8SM PRES be expensive FV
 'The fish is expensive'
 - b. *Va- anana va- **dil**- a*
 2-child 2SM cry FV
 'Children are crying'

- c. *N si- haka* > *Nzihaka*
 be 8 fish 'It is fishes'

There are two /d/: the plosive /d/, represented as **dh** in the writing system as in (78a) and the implosive /ɗ/, orthographically represented as **d** as in (78b). As already observed on bilabials in (75), the letter “h” is used for distinguishing the plosive **dh** from the implosive **d**. The example in (78c) suggests that /s/ changes to /z/ when the nasal verbal copula is prefixed to the noun prefix *si-*: s > z. As already noted above, the nasal verbal copula is N in accordance to the type of the following consonant.

(d) **Laterals**

This column consists of two fricatives distinguished orthographically by transposition of “h”, as seen below:

- (79) a. *Bhuke a- hlamal- a di-gova*
 1PN 1SM admire FV 5-lake
 ‘Buke is admiring the lake’
- b. *Bhuke a- lhum-a ngu thayi*
 1PN 1SM fashion with 9 tie
 ‘Buke fashions with his tie’

The lateral fricative [ɬ], orthographically represented as **hl**, is voiceless whereas [ɮ], orthographically represented as **lh**, is voiced.

(e) **Palatal**

The examples below show the occurrence of palatal consonants in Cilenge.

- (80) a. *Ni- xav- ile ci-maha*
 1SG SM buy PST 7-thing
 ‘I have bought a thing’
- b. *N ci- maha* > *Njimaha*
 be 7 thing ‘It is a thing’
- c. *Ni- a- chumayel- a*
 1SG SM PRES preach FV
 ‘I preach’

- d. /xj/ *Ni- xav- ile di-xjanela* (< Portuguese *janela*)
 1SG SM buy PST 5- window
 ‘I have bought a window’
- e. /y/ *ni- y- a Manjakazi*
 1 SG SM go FV LOC PN
 ‘I am going to Manjacaze’
- f. *ni- y^h- a ngu ndilo*
 1 SG SM burn FV by 3 fire
 ‘The fire burns me’
- g. *N yi-angu mi-rende > Njangu mirende*
 be 4 SM- mine 4- medicine ‘They are mine, the medicines’

The examples in (80a) and (80c) suggest that there are two /c/, one non-aspirated [t] and the aspirated one as [tʰ]. As shown in (80b), /c/ changes to [dʒ] spelt *j* when the nasal verbal copula is prefixed to the noun prefix *ci-*: *c > j*. In (80d) the sound [ʒ] spelt *xj* normally occurs in borrowed words. The examples in (80e) and (80f) indicate a minimal pair given by the non-aspirated sound [j] spelt *y* and the aspirated sound [jʰ] spelt *y^h*. In predicative cases, as shown in (80g) /y/ becomes /j/ when the nasal verbal copula is prefixed to the noun prefix *yi-*: *y > j*.

(f) Velar

The examples below show velar consonants in Cilenge.

- (81) a. *U- na- w- a*
 2 SG SM FUT fall FV
 ‘You will fall’
- b. *Mati ma- na- wh- a*
 6 water 6 SM FUT evaporate FV
 ‘The water will evaporate’
- c. *M wu- kara > Mbukara*
 be 14 laziness ‘It is laziness’
- d. *Ni- xav- ile n’awu*
 1SG SM buy PST 9 pipe (smoking)
 ‘I have bought a pipe’

- e. *A- hok- ile n'wamilambo* "hurricane" (cl.1a)
1SM arrive PST 1a hurricane
'The hurricane has arrived'
- f. *Ni- won- i khawu*
1SG SM see PST 9 monkey
'I saw a monkey'
- g. *N ku- xav- a > Nguxava*
be 15 buy FV 'It is to buy'

The example in (81a) shows /w/ as a root of the verb *kuwa* 'to fall'. This consonant may be aspirated, as seen in (81b). In (81c), /w/ becomes /b/ when the noun prefix *wu-* is preceded by the nasal verbal copula: *w > b*. The example in (81e) indicates that the nasal [ŋ] spelt *n'* may be labialized by /w/: the sound [ŋ^w] is spelt *n'w*. Aspirantion also occurs in /k/, as illustrated in (81f). In (81g), /k/ becomes /g/ when the nasal verbal copula is prefixed to the noun prefix *ku-*: *k > g*.

(g) Click

There are some clicks in Cilenge as shown in the examples below.

- (82) a. *Ni- lav- a di-qatha di-a nyama*
1SG SM want FV 5-chunk 5-ASSOC 9 meat
'I want a chunk of meat'
- b. *Ni- qhewul- a va- ngana*
1SG SM shake hands FV 2-friend
'I shake hands with my friends'
- c. *Ni- xav- ile ci-gqoko*
1SG SM buy PST 7-hat
'I bought a hat'
- d. *Tate a- t- a ni n'qolo*
1a father 1SM come FV with 9 cart
'My father comes with a cart'

In (82a) the sound [!] is spelt *q*. In (82b) the sound [!^h] is spelt *qh* whereas in (82c) the sound [g!] is spelt *gq* and in (82d) the sound [ŋ!] is spelt *n'q*.

(h) Glottal

The glottal fricative /*h*/ contains an aspiration.

- (83)
- a. *Dali a- hamb- a pulani*
1PN 1SM make FV 9 plan
'Dali is making a plan'
- b. *Tate a- na- ni- h- a di-pawa*
1a father 1SM FUT 1SG OM offer FV 5-bread
'My father will give me bread'

3.1.3 Tone

Cilenge is a tonal language. The tone plays a role in distinguishing meaning (lexical tone) and, as indicated in subsection 2.3.4.1, it can also distinguish grammatical relationship (grammatical tone), especially on tense and negation, the main scope of our work. Consider the following examples.

- (84)
- a. *Ni- won- í*
1SG SM see PST
'I saw'
- b. *Ní- wón- i*
1SG SM see NEG
'I do not see'
- c. *Ci-gondo ci- a- pand- a*
7-occiput 7 SM PRES pain FV
'My occiput hurts'
- d. *Ci-góndó ci- a- karat- a*
7-lesson 7 SM PRES difficult FV
'The lesson is difficult'

In (84a) the high tone (marked with an acute accent) on the final /*i*/ encodes past tense, whereas in (84b) the high tone on SM /*Ní*/ and verb root /- *wón*-/ distinguishes negation. The examples in (84c) and (84d) distinguish two nouns by varying the pitch at the syllables: /-*gondo*/ 'occiput' vs /- *góndó*/ 'lesson'. As seen, the contrastive tone may occur on nouns or on inflected verb forms.

In the noun class system, in general, all noun prefixes are low toned. Concerning the verbal structure, in Cilenge the placement of the high and low tone is dictated by the

inflectional category of the verb. For instance, in affirmative forms, while the subject marker (SM) first and second person (either singular or plural) bear a low (L) tone, the third person bears high (H) tone. As will be discussed in the following chapter, the TM can be expressed by different allomorphs by virtue of tone. In the next section we present the syllable in Cilenge.

3.1.4 The syllable in Cilenge

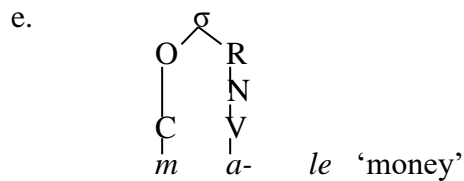
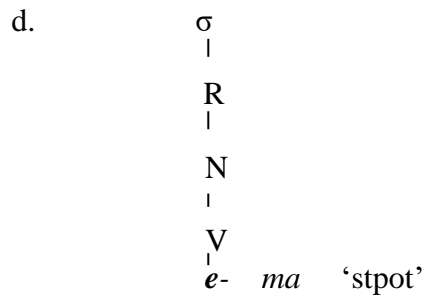
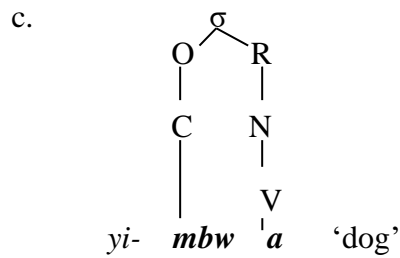
As already referred to in subsection 3.1.1, the canonical syllable structure in Cilenge, as in other Bantu languages, typically comprehends a sequence of consonant and vowel or onset plus rhyme.

The syllable structure is typically composed of the CV(C) sequence. The vowel forms the nucleus (N) of the syllable, and the preceding consonant shapes the onset (O). The onset may consist of a consonant or consonant cluster. The rhyme (R) consists of a nucleus and an optional coda (optional final consonant).

There are two types of syllable structure observed in the languages: the CVC and the CV sequences. The former is called closed syllable because it ends in a consonant (termed coda) and the latter is called open syllable, as it ends in a vowel sound (without coda). As in other Bantu languages, Cilenge displays open syllables as they end in a vowel sound. In this language, the syllable sometimes consists of a single vowel or a single consonant. The only syllabic consonant is the syllabic nasal represented orthographically by *m'* or by *n'* in nominal prefix. The syllabic nasal lacks a vocalic nucleus due to the elision of the vowel. The following structures in (85) comprise the syllable structure of Cilenge.

(85) a.
$$\begin{array}{c} \sigma \\ | \\ O \\ | \\ N \\ | \\ m' \end{array} \text{ } pawu \text{ 'cassava'}$$

b.
$$\begin{array}{c} \sigma \\ / \quad \backslash \\ O \quad R \\ | \quad | \\ C \quad N \\ | \quad | \\ bw \quad V \\ | \quad | \\ a- \end{array} \text{ } ka \text{ 'arrive'}$$



With regard to (85a), the syllable *m'*- is composed of syllabic nasal, which is also the onset. It appears because of the elision of the vowel of the nominal prefix *mu*- of class 3 and the remaining consonant assimilates features of the following consonant. The syllable *bwa*- in (85b) consists of the onset represented by a consonant cluster (the implosive voiced [b] followed by the glide /w/) and of the rhyme with a nucleus represented by the central open /a/. In (85c), the syllable *-mbwa* is represented by the central open /a/ as nucleus, and by a complex onset composed of the nasal /m/, the implosive voiced [b] and the glide /w/. As referred to in subsection 3.1.2, these make up pre-nasalization (ⁿC) and gliding (C^w), simultaneously. The syllable in (85d) is only represented by the mid front vowel /e/, which is also the rhyme, while in (85e) the syllable *ma*- is composed of the onset represented by the bilabial nasal /m/ and the rhyme with a nucleus represented by the central open /a/. Now we turn to the noun class system.

3.2 Noun class system

The noun class system has a bearing in all the grammar of Bantu languages, including Cilenge, particularly the noun class prefixes as they command the whole agreement systems in these languages.

As is the case in other Bantu languages, nouns in Cilenge fall into classes, mostly indicated by prefixes. There are sixteen noun classes in Cilenge (generally the odd number denoting singular and the even number denoting plural), as shown in Table 3 below.

Table 3: Cilenge nominal classes, prefixes and their nominal concords

Classes	Prefixes	Semantic domain	Example and gloss	Nominal agreement	Personal pronouns
1	<i>mu-</i> (<i>m-</i> <i>mw-</i>)	human beings	<i>mwanana</i> ‘child’	<i>a-</i>	<i>ene</i>
1a	\emptyset -	proper names, kinship terms	<i>tate</i> ‘father’	<i>a-</i>	<i>ene</i>
2	<i>va-</i> (<i>v-</i>)	plural of 1 and 1a	<i>vanana</i> ‘children’ <i>vatate</i> ‘fathers’	<i>va-</i>	<i>vona</i>
3	<i>mu-</i> (<i>m-</i>) \emptyset -	plants, animals	<i>m'bhomu</i> ‘lemon tree’	<i>wu-</i>	<i>wona</i>
4	<i>mi-</i>	plural of 3 and time reference	<i>mibhomu</i> ‘lemon trees’ <i>mixo</i> ‘morning’	<i>yi-</i>	<i>yona</i>
5	<i>di-</i>	fruits, animals	<i>didimwa</i> ‘orange’	<i>di-</i>	<i>dona</i>
6	<i>ma-</i>	regular plural of 5, liquids	<i>madimwa</i> ‘oranges’	<i>ma-</i>	<i>wona</i>
7	<i>ci-</i>	things, languages, animals	<i>cifenyoy</i> ‘comb’	<i>ci-</i>	<i>cona</i>
8	<i>si-</i>	plural of 7	<i>sifenyoy</i> ‘combs’	<i>si-</i>	<i>sona</i>
9	<i>yi-</i> <i>N-</i>	animals, things	<i>yimbwa</i> ‘dog’ <i>nduku</i> ‘stick’	<i>yi-</i>	<i>yona</i>
10	<i>ti-</i>	plural of 9 and 11	<i>timbwa</i> ‘dogs’ <i>tinduku</i> ‘sticks’	<i>ti-</i>	<i>tona</i>
11	<i>li-</i>	body parts, abstractions	<i>litiho</i> ‘finger’ <i>lifo</i> ‘death’	<i>li-</i>	<i>lona</i>
14	<i>wu-</i>	abstracts,	<i>wulwati</i> ‘illness’	<i>wu-</i>	<i>wona</i>

		collectives	<i>wusokoti</i> ‘ant colony’		
15	<i>ku-</i>	Verbal	<i>kugonda</i> ‘to study’	<i>ku-</i>	<i>Kona</i>
16	<i>ha-</i>	locative	<i>ha ciken</i> ‘at the entrance’	<i>ku-</i>	<i>Kona</i>
17	<i>ka-</i>	locative	<i>ka kokwani</i> ‘to the grandfather’s’	<i>ku-</i>	<i>Kona</i>
18	<i>mu-</i>	locative	<i>mu nyumbani</i> ‘inside the house’	<i>ku-</i>	<i>Kona</i>

Table 3 above presents noun prefixes of Cilenge with the related concord system for each class. In this language nominal prefixes have no initial vowel, as shown in the examples below.

(84) Class 1/2 (*Mu-/ Va-*):

a. *Mw- ingi a- na- bhik- a nyama*
 1-daughter-in-law 1SM FUT cook FV 9 meat
 ‘The daughter-in law will cook meat’

b. *V-ingi va- bhik- ile nyama*
 2-daughter-in-law 2SM cook PST 9 meat
 ‘Daughters-in-law cooked meat’

c. *N'- thu a- gond- a ti-mhaka*
 1-person 1SM study FV 10-fact
 ‘A person analyses facts’

d. *Va-thu va- gond- a ti-mhaka*
 2-person 2SM study FV 10-fact
 ‘People analyse facts’

e. *Mu-hedeni a- na- gond- a mhaka*
 1-atheist 1SM FUT study FV 9 fact
 ‘The atheist will analyse the fact’

f. *Va-hedeni va- na- gond- a mhaka*
 2-atheist 2SM FUT study FV 9 fact
 ‘Atheists will analyse the fact’

g. *M'-faransa a- wombomb- a ci-faransa*
 1-French 1SM speak FV 7- French
 ‘A Frenchman speaks French’

- h. *Va-faransa va- hok- ile*
 2-French 2SM arrive PST
 ‘French people have arrived’

As seen, the class 1 prefix has three variants, namely /*mu-*/, /*mw-*/ and /*m-*/. /*mu-*/ occurs before nominal stems starting with the consonant **h**. /*mw-*/ occurs before nominal stems starting with a vowel. /*m-*/ occurs before stems starting with **b**, **f**, **p** and **v** while other consonants select /*n-*/. In (84a), the noun prefix is /*mw-*/ due to the phonological process that impedes the sequence of vowels, as seen in subsection 3.1.1: the high vowel /*u*/ changes to /*w*/ when it precedes any different vowel. In (84b), the plural prefix is /*v-*/, because the low vowel /*a*/ is deleted before high vowel /*i*/.

(85) Class 1a/2 (*Ø-/Va-*)

- a. *Ø- mame ni Ø- kokwani va- dim- a*
 1a-mother and 1a-grandmother 2SM plough FV
 ‘My mother and my grandmother plough’
- b. *Ø- maseve a- bwak- ile*
 1a-godfather 1SM arrive PST
 ‘The godfather has arrived’
- c. *Va- maseve va- bwak- ile*
 2-godfather 2SM arrive PST
 ‘Godfathers have arrived’

The class 1a has a zero prefix but it controls agreement as the rest of class 1. In (85a) two kinship terms make up a compound noun phrase (NP). Although this is not frequent, the conjoined noun phrase is acceptable as both nouns denote human beings. The usual construction in Cilenge postpones the second element to the verb forms, as follows in (86). This strategy is also allowed for conjoining noun phrases headed by nouns denoting humans and non-humans.

- (86) *Ø-mame a- dim- a ni Ø- kokwani*
 1a-mother 1SM plough FV with 1a-grandmother
 ‘My mother ploughs with my grandmother, i.e. they plough together’

(87) Class 3/4 (*Mu-/Mi-*)

- a. *N'- ndonga wu- w- ite*
 3-tree 3SM fall PST
 ‘The tree has fallen’

- b. *Mi-ndonga yi- w- ite*
 4-tree 4SM fall PST
 'Trees have fallen'
- c. *N'-nyoka wu- a- this- a*
 3-snake 3SM PRES terrify FV
 'The snake terrifies'
- d. *Mi-nyoka yi- a- this- a*
 4-snake 4SM PRES terrify FV
 'Snakes terrify'
- e. *M'-movha wu- pind- ile*
 3-car 3SM pass PST
 'The car has passed'
- f. *Mi-movha yi- pind- ile*
 4-car 4SM pass PST
 'Cars have passed'
- g. *Ø- moya wu- a- pek- a*
 3a-wind 3SM PRES beat FV
 'The wind is blowing hard'
- h. *Mu-nyu wu- lung- ile*
 3-salt 3SM goog PST
 'Salt is good'
- i. *Mi-nova yi-a wu-xika yi- a- titil- a*
 4-afternoon 4-ASSOC 14-winter 4SM PRES cold FV
 'Winter afternoons are cold'

Members of this nominal class pertain to plants and animals. However, some terms referring to natural phenomena, as in (87g), and objects may occur, as seen in (87e) and (87h). Some nouns in class 3 have a zero prefix, as in (87g). Such nouns may be said to belong to class 3a.

(88) Class 5/6 (*Di-/Ma-*)

- a. *Di-khokho di- sin- ile*
 5-coconut 5SM rot PST
 'The coconut is rotten'
- b. *Ma-khokho ma- sin- ile*
 6-coconut 6SM rot PST
 'Coconuts are rotten'

- c. *Di-kondzo di- dy- a ti-nyume*
 5-mouse 5SM eat FV 10-peanut
 ‘The mouse eats peanuts’
- d. *Ma-kondzo ma- f- ite*
 6-mouse 6SM die PST
 ‘Mice have died’
- e. *Ma-langa ma- hok- ile*
 6-summer 6SM arrive PST
 ‘Summer has arrived’
- f. *Ma- si ma- kul- is- a mw-anana*
 6-mother’s milk 6SM grow CAUS FV 1-child
 ‘Mother’s milk grows a child’

Terms referring to liquids have no singular forms.

(89) Class 7/8 (*Ci-/Si-*)

- a. *Ci- khwa ci- a- hind- a*
 7-knife 7SM PRES sharpen FV
 ‘It is a sharp knife’
- b. *Si-khwa si- funy- ek- ile*
 8-knife 8SM break STAT PST
 ‘Knives have broken’
- c. *Ci-wonga ci- dy- a di-kondzo*
 7-cat 7SM eat FV 5-mouse
 ‘The cat eats a mouse’
- d. *Si-wonga si- dy- a ma-kondzo*
 8-cat 8SM eat FV 6-mouse
 ‘Cats eat mice’
- e. *Ci-ngiza ci- hamban- i ni Ci-lenge*
 7-English 7SM differ PST from 7-Lenge
 ‘The English language differs from *Cilenge*’

As indicated in Table 3 above, this is the class of things, including languages. However, it contains terms referring to animals, as seen in (89c) and (89d).

(90) Class 9/10 (*N-/Ti-*)

- a. *Ngonyamu yi- dy- a nyama*
9 lion 9SM eat FV 9 meat
'The lion eats meat'
- b. *Ti-ngonyamu ti- dy- a nyama*
10-lion 10SM eat FV 9 meat
'The lions eat meat'
- c. *Yi-mbwa yi- n'o- te m'- mpfundla*
9-dog 9SM catch PST 3 rabbit
'The dog caught a rabbit'
- d. *Ti-mbwa ti- na- n'ol- a mi-mpfundla*
10-dog 10SM FUT catch FV 4 rabbit
'Dogs will catch rabbits'
- e. *Mbiya yi- fay- ek- ile*
9 plate 9SM break STAT PST
'The plate has broken'
- f. *Ti-mbiya ti- fay- ek- ile*
10-plate 10SM break STAT PST
'Plates have broken'

Members of nominal class 9/10 pertain to animals and things. The prefix of class 9 is /N-/. However, as seen in (90c), some nouns appear with the prefix /yi-/. The plural forms of these items is /ti-/.

(91) Class 11/10 (*Li-/Ti-*)

- a. *Li-mbavhu li- a- pand- a*
11-rib 11SM PRES pain FV
'The rib is painful'
- b. *Ti-mbavhu ti- raru*
10 rib 10 three
'Three ribs'
- c. *Li-huhe li- ho*
11-madness 11SM exist
'Madness exists'

Nouns in class 11/10 pertain to parts of the body and abstractions. Terms denoting abstractions do not pair at all.

(92) Class 14 (*Wu-*)

- a. *Wu-lwati wu- longolok- a ni ndzala*
14-illness 14SM follow FV with 9 hunger
'Illness accompanies the hunger, i.e. illness and hunger come together'
- b. *Ma-lwati ma- a- mu- hluph- a*
6-illness 6SM PRES 1OM harm FV
'Illness harms him'
- c. *Wu-siwana wu- hi- tal- el- te*
14-poverty 14SM us abound APL PST
'Poverty abounds in us'
- d. *Wu-sokoti wu- lav- a wu-luva*
14-ant 14SM seek FV 14-flower
'The colony of ants seeks blossoms'

This class contains predominantly abstracts and collectives. Normally nouns in class 14 have no plural forms. However, plural is sporadically obtained by using class 6, as in (92b).

(93) Class 15 (*Ku-*)

- a. *Hi- lav- a ku- thum- a*
1PL SM want FV 15 work FV
'We want to work'
- b. *Hi- y- a ku- thum- a- ni*
1PL SM go FV 15 work FV LOC
'We are going to the work's place'
- c. *Ku-gond- a ku- a- vhun- a*
15-study-FV 15SM PRES help FV
'It is useful to study'

Class 15 contains verbal nouns. Verbs are regarded as part of the noun classes in Bantu languages because they may function like nouns: (i) they may be employed as object as in (93a); (ii) by suffixing */-ni/*, verbal nouns can denote information on location as in

(93b). This process of derivation is regular and productive in nouns; (iii) like other noun prefixes, the prefix of verbal infinitives may determine the agreement pattern as in (93c).

(94) class 16 (*Ha-*)

Ha meza-ni ku- bas- ile
 16 table-LOC 16SM clean PST
 ‘(On) the table is clean’

(95) class 17 (*Ka-*)

Ka tate ku- bas- ile
 17 father 16SM clean PST
 ‘(At) the father’s is clean’

(96) class 18 (*Mu-*)

Mu Manjakazi ku- bas- ile
 18 PN LOC 16SM clean PST
 ‘(In) Manjacaze is clean’

Contrary to what is obtained in other languages such as Nyanja and Nyungwe, where locative prefixes are noticed and used for agreement, in Cilenge locatives are not productive, in the sense that they do not occur as class prefixes. However, it seems that vestiges of what would have been classes 16 (*pa-*), 17 (*ku-*) and 18 (*mu-*) they appear in sentences as in (94), (95) and (96). As seen, all these items use /*ku-*/ for agreement.

In Cilenge, locatives are usually derived by suffixing /-*ni*/ to nouns as illustrated below.

(97) a. *Va- dzumb- a Bahule- ni*
 2SM reside FV PN LOC
 ‘They live in Bahule village’

b. *Ni- na- bhal- a dibhuku- ni*
 1SG SM FUT write FV book LOC
 ‘I shall write/register [it] in the book’

However, there are nouns that are inherently locatives and therefore they cannot take the suffix /-*ni*/ . All locatives use /*ku-*/ for agreement. Consider the following examples.

- (98) a. *Ku- a- pand- a ndani*
 LOC SM PRES painful FV LOC inside/stomach
 ‘[My] stomach hurts’, i.e. ‘I have stomach ache’
- b. *Ku- a- pand- a *ndani-ni*
 LOC SM PRES painful FV inside/stomach-Loc
 ‘[My] stomach hurts’, i.e. ‘I have stomach ache’

As in Tsonga, there are many inherent locatives in Cilenge. They do not take the suffix /-ni/ as seen below.

- (99) a. *Kule* > **kule-ni* ‘distant’
 b. *Hafuhi* > **hafuhi-ni* ‘near’
 c. *Hahandze* > **hahandze-ni* ‘out side’
 d. *Lwandle* > **lwandle-ni* ‘sea’
 e. *Ngweno* > **ngweno-ni* ‘nowadays’, ‘modernity’

3.2.1 Absolute pronouns

The verb complex comprises, among other elements, subject and object markers as pronominal arguments. As those prefixes establish co-referentiality with the NP functioning as SM or OM, it is therefore appropriate to provide a brief description of words which can be used to substitute the NP in Cilenge: the absolute pronouns. These kinds of pronouns are used to indicate a noun or a person and thus normally carry information on the noun class as indicated in Table 3 above. Consider the following examples.

- (100) a. *Ti-homu ti- dy- ite wu-asi.*
 10-cow 10SM eat PST 14-grass
 ‘Cows have eaten grasses’
- b. *Tona ti- en- ile*
 10 they 10SM grow fat PST
 ‘They [cows] are fat’
- c. *Athu hi- y- a cokolwa-ni.*
 we 1PL SM go FV school-LOC
 ‘We are going to school’
- d. *Kona ku- bas- ile*
 LOC it LOC SM clean PST
 ‘It is clean’

In the initial sentence (100a) the subject is expressed by the nominal phrase *tihomu* ‘cows’. In (100b) this subject NP is substituted by an absolute pronoun *tona* ‘they’. *Kona* ‘it’, in (100c), is an absolute pronoun referring to the locative *cikolwani* ‘to school’. As seen, absolute pronouns are linked to the noun classes they are referring to. In (100c), *athu* ‘we’ is a personal absolute pronoun first person plural.

Personal absolute pronouns may occur as subject or object markers as illustrated below.

- (101)
- a. *Ani ni- gond- ile*
I 1SG SM study PST
‘I have studied’
 - b. *Tate a- ni- won- i*
1a father 1SM 1SG OM see PST
‘My father saw me’
 - c. *Awe wu- gond- ile*
you 2SG SM study PST
‘You have studied’
 - d. *Tate a- ku- won- i*
1a father 1SM 2SG OM see PST
‘My father saw you’
 - e. *Ene a- gond- ile*
He/she 1SM study PST
‘He/she has studied’
 - f. *Tate a- mu- won- i*
1a father 1SM 1OM see PST
‘My father saw him/her’
 - g. *Anu mi- gond- ile*
you 2PL SM study PST
‘You have studied’
 - h. *Tate a- mi- won- i*
1a father 1SM 2PL OM see PST
‘My father saw you’
 - i. *Vona va- gond- ile*
2 they 2SM study PST
‘They have studied’
 - j. *Tate a- va- won- i*
1a father 1SM 2OM see PST
‘My father saw them’

The examples in (101a-j) show subject and object pronouns for the first, second and third person singular and plural. Now we turn to the Cilenge verb complex.

3.3 Cilenge verb complex

Tense and negation markers form part of the verb structure and they are the main concern of this study. It is therefore appropriate to provide a description of the verb system that hosts them. In Cilenge there are intransitive, monotransitive and ditransitive verbs, according to the respective argument structure.

(i) Intransitive verbs select only one external argument, the subject, which establishes co-referentiality with the subject marker as indicated in the example in (102). The presence of the NP functioning as the subject is not obligatory because that category is fulfilled in the verb complex by means of the pronominal argument subject marker (SM).

- (102) *Yi-mbwa yi- f- ite*
 9-dog 9SM die PST
 ‘The dog died’

The verb *-fa* ‘die’ in (102) is an intransitive in the sense that it does not select an object.

(ii) Monotransitive verb selects two arguments: a subject and an object. This kind of verb demands an internal object linked to the theme thematic role. This object may occur as a co-referent pronominal argument, such as the object marker (OM), in the verb complex.

- (103) *Di-horana di- va- won- i*
 5-girl 5SM 2OM see PST
 ‘The girl saw them’

The example in (103) shows that the verb *-wona* ‘see’ selects an object, the OM *-va-*, and a subject linked to the thematic role agent, the NP *dihorana* ‘girl’, represented in the verb complex by the subject marker *di-*.

(iii) Di-transitive verb presents three arguments: one subject (SUBJ) and two objects, one as benefactive (OBJ1) and the second theme (OBJ2) as in the following examples.

- (104) a. *Madhala a- na- h- a ti-homu mati*
 1PN 1SM FUT give FV 10-cow-OBJ1 6water-OBJ2
 ‘Madala will give water to the cows’
- b. *Madhala a- na- ti- h- a mati*
 1PN 1SM FUT 10 OM (OBJ1) give FV 6 water OBJ2
 ‘Madala will give them water’

The verb *-ha* ‘give’, besides the subject *Madhala* linked to the thematic role agent, requires two objects: the object1 *tihomu* ‘cows’ as the beneficiary, and the object2 *mati* ‘water’ as the theme. An aspect is observed when two NP objects co-occur. In double-object construction, the OM exists only for the beneficiary, as in (104b). Only the benefactive *tihomu* ‘cows’ may be represented in the verb complex by the object marker *-ti-*.

In Cilenge there are verbs that are inherently ditransitive like *kuha* ‘to give’ or ‘to offer’. However, it should be observed that the argument structure might be influenced by derivational suffixes (also known as verbal suffixes or extensions). Thus, the number of arguments that the verb takes might be increased or decreased. By adding an extension, an intransitive verb becomes transitive or a transitive verb is transformed into an intransitive, as illustrated below.

- (105) a. *Mi-ndonga yi- na- w- a*
 4-tree 4 SM FUT fall FV
 ‘The trees will fall’
- b. *Mi-ndonga yi- na- w- el- a nyumba*
 4-tree 4 SM FUT fall APPL- FV 9 house OBJ
 ‘The trees will fall onto the house’
- c. *Mame a- dy- a di- dimwa*
 1a mother 1SM eat FV 5-orange OBJ
 ‘My mother eats orange’
- d. *Mame a- dy- is- a mw-anana di-dimwa*
 1a mother 1SM eat CAUS FV 1-child OBJ1 5-orange OBJ2
 ‘The mother makes the baby eat orange’

From the foregoing examples, the following observations can be made:

- In (105b), the applicative extension */-el-/* yields an internal argument (linked to the patient thematic role) to be attached to the verb. In this case, the intransitive verb *kuwa* ‘to fall’ becomes a transitive verb requiring the object *nyumba* ‘house’.
- In (105d), through the use of the causative extension */-is-/* the monotransitive verb *-dya* ‘eat’ becomes ditransitive, because it requires three arguments, namely the subject (SUBJ) *mame* ‘mother’ linked to the agent thematic role, the object two (OBJ2) *mwanana* ‘child’ linked to the beneficiary thematic role, and the object one (OBJ1) *didimwa* ‘orange’ linked to the theme thematic role.

3.3.1 Cilenge verb structure

As in other Bantu languages, the Cilenge verb structure comprises several prefixes and suffixes attached to the verb root. The Cilenge verb complex displays a maximum of eight slots:

(106) **SM-Negative-T(A)- OM- root-Extension(s)-Final-Suffix.**

mi- nge- ta- va- gond- is- e- ni

(That you do not come to teach them)

When taking a close look at the structure, it should be noticed that several elements are attached to the root to form a verb complex. Before the verb root, several prefixes encode syntactical information on the subject, tense, negation and object. On one hand, there are inflectional suffixes after the verb root. They encode syntactical information on tense, negation, mood and aspect, while on the other hand, derivational suffixes (extensions) alter the predicative argument structure or simply affect the semantic information of the verb.

In Cilenge the subject marker (SM) occupies first position in all tenses either in affirmative forms or in negative forms. As already referred to in Section 3.2, SM agrees with the noun class features of the preverbal subject, because each noun class prefix has

its corresponding agreement marker, as was shown in Table 3. The SM in (107) determines the agreement system in the verb complex.

- (107) *Ci-wonga ci- dy- ite ma-kondzo*
 7-cat 7SM eat PST 6-mouse
 ‘The cat has eaten mice’

The object marker (OM) is a prefix attached adjacent to the verb root regardless of other existing prefixes. It is therefore part of the verbal complex. As already noted in Section 3.2, OM establishes co-referentiality with its corresponding object and both can co-occur, as seen below.

- (108) *Mara a- ci- won- i ci-wonga*
 1PN 1SM 7OM see PST 7-cat
 ‘Mara saw it, the cat’

As we shall see in Chapter Four, apart from SM and OM, Cilenge has tense markers as prefixes or as suffixes. For instance, present and future tense markers are always affixed to the left of the root, as in (109). On the contrary, past may precede or follow the root.

- (109) *Mara a- na- dil- a; ene a- won- i ci-wonga*
 1PN 1SM FUT cry FV she 1SM see PST 7-cat
 ‘Mara will cry; she saw a cat’

Negation markers also may appear as prefixes or as suffixes as shown in (110). As prefixes, they usually follow tense markers.

- (110) *Va- ka- gond- i*
 2SM NEG1 study NEG2
 ‘They do not study’

3.4 Summary

In this chapter, the main features of Cilenge were presented, namely the sound system, the syllable structure, the nominal classes, and the verb system to provide a better understanding of tense and negation markers. The next chapter will deal with negation and tense formation in Cilenge.

Chapter Four: Tense and Negation Markers in Cilenge

4.0 Introduction

This chapter presents the analysis of tense and negation markers of the Cilenge verb. As already referred to in Chapter Two, in this language there are two ways of expressing negation, namely single negation with one or two morpheme prefixes or one morpheme suffix, and double negation formed by two morphemes one of which is a prefix and the other a suffix. As stated in the previous chapters, in Cilenge, tense markers occur as prefixes and/or as suffixes. In the perfect, all tense markers are in complementary distribution. Apart from affixes, tense and negation may be expressed by tone. As affirmative verb forms have more slots of tense markers than in negative verb forms, the examination will be conducted separately. Thus, while Section 4.1 focuses on tense marking in affirmative verb forms, Section 4.2 examines tense and negation markers in negative verb forms. The relationship between tense markers and negation formatives is discussed in Section 4.3. Finally, a summary of the chapter is presented in Section 4.4.

4.1 Affirmative verb forms

This section seeks to examine the placement of tense markers in the verb complex in Cilenge. The section is organized as follows: subsection 1 discusses tense marking in the present tense. Subsection 2 focuses on tense marking in the past tense. Subsection 3 examines tense marking in the future tense. Subsection 4 considers tense marking in subjunctives. Subsection 5 analyses tense marking in conditionals. Subsection 6 presents tense marking in relative constructions. Subsection 7 summarises the discussions.

4.1.1 Present tense

The present is used to indicate that the action (i) is taking place in the moment of the utterance or (ii) it occurs habitually. In the indicative mood, the present is characterized by four types with tense marker always placed immediately after the subject marker: present with focus, habitual present, present continuous and present progressive.

4.1.1.1 Present with focus

This present form is characterized by having zero tense sign (-Ø-) and an obligatory object as the NP, as seen in the examples below.

- (111) a. *Hi- dil- a tate*
 1PL SM cry FV 1a father
 'We mourn/are mourning our father's death'
- b. **Hi- dil- a*
 1PLSM cry FV
 'We mourn/are mourning'

According to Trask (1997), cited in Rose, Beaudoin-Lietz & Nurse (2002:33), **focus** is "special prominence given to some element to mark it as expressing the most important new information or to contrast it with something else". This kind of present may occur as a sequence of preceding speech such as the question "what do you do?" If the object is omitted, as in (111b), the sentence will be considered ill-formed.

4.1.1.2 Habitual present

This is indicated by the tense marker *-a-* after the subject marker. The object NP is not obligatory. However, instead of the prefix *a-*, this present form recurs to *ya-* (class 1) as subject marker for the third person singular. Consider the examples in (112).

- (112) a. *W- a- phazam- a ma-hungu*
 2SG SM TM mistake FV 6-news
 'You mistake/are mistaking the subject, i.e., you are wrong'
- b. *Tate y- a- phazam- a ma-hungu*
 1a father 1SM TM mistake FV 6-news
 'The father mistakes/is mistaking the subject, i.e., he is wrong'
- c. *H- a- phazam- a*
 1PL SM TM mistake FV
 'We mistake'

From these examples, it can be observed that this form of present refers to a habitual action, i.e., a customary action, an action done regularly. However, according to the context, it may be seen as a continuous action, as in (112c). As already observed in sub-section 3.1.1, the high vowel is always omitted when in contact with other vowels, as in (112a) *wu-* and (144c) *hi-*. In (112b), two identical vowels are fused into a single vowel, yielding *ya-*.

4.1.1.3 Present continuous

The tense marker *-o-* refers to a continuous action showing that an action is being carried on over a period and it also follows the subject marker. The vowel of the subject marker is elided due to the presence of the tense marker *-o-*. This elision shows that the two morphemes are bound together in a single syllable at the surface realization. This is illustrated in the sentences below.

- (113) a. *Va-anana v- o- gond- a ku-bhala*
 2-child 2SM TM study FV 15-write
 ‘Children are studying to write’
- b. *H- o- sakan- a*
 1PL SM TM play FV
 ‘We are playing’

As seen, subject markers *va-* in (113a) and *hi-* in (113b) appear bounded together to the tense marker *-o-*, yielding *vo-*, *ho-*. The examples suggest that any preceding vowel is omitted before the mid-back vowel.

4.1.1.4 Present progressive

When showing that a previous action (or state) is still going on, a progressive form is employed and the tense marker consists of a double sign *-a- -nga-* (**compound tense prefix**) following the subject marker. Consider the example below.

- (114) *Mame y- a- nga- mam- is- a mw-anana, a- na- t- a*
 1a mother 1SM TM1 TM2 suck CAUS FV 1-child 1SM FUT come FV
 ‘My mother is still suckling the baby, and then she will come’

In this example, it should be observed that the first element *-a-* locates the action in the present time whereas the second element *-nga-* denotes that the action has been going on previously. Here too the subject marker is bound to the first element of TM, as in (*ya-*).

The above examples show that, in Cilenge, present tense could be signed by the following morphemes placed after the SM: *-o-*, *-a-*, *-a- -nga-* and Ø. Taking into account the time of utterance, these different realizations of the present could be viewed as aspectual manifestations, rather than various present tense markers (cf. Nurse

2003:99). However, it should be noted that tense may be very closely associated with aspect (cf. Nida 1976:167). Thus, the semantic classification should prevail for different types of present used to signal a wide variety of meanings at the same time when the utterance takes place.

4.1.2 Past tense

The past tense indicates the event happened prior to the moment of speaking. In Cilenge the past displays a wide range of morphemes and sound changes. These phonological processes are dictated by the verb root and the location of tense suffixes, as discussed in Chapter Two. Some tense markers occur as prefixes whereas other morphemes appear as suffixes only or as prefixes and suffixes simultaneously. A detailed discussion of this is provided below.

4.1.2.1 Past perfect

The perfect may be used to indicate a state or quality pertaining to a certain entity. It is normally signalled by the tense suffix *-ile*. However, there are three other perfect ending forms *-i*, *-ite* and *-te* dictated by the tonal characteristics, the structure of the root and the kind of last consonant. All of them are placed after the verb root. While the reduced perfect end *-i* is normally used with high-toned disyllabic verb roots ending with the nasal alveolar /n/ and with polysyllabic verb roots ending with /n/, the suffix *-ite* is employed with monosyllabic verb roots only. On the other hand, *-te* selects verb roots ending with the lateral alveolar /l/. It should be noted that every perfect ending form encodes exceptions for its application. Consider the following examples.

- (115)
- a. *Di-horana di- xav- ile nyama*
5-girl 5SM buy TM 9 meat
'The girl has bought meat'
 - b. *Di-horana di- t- ile ni ma-bhuku*
5-girl 5SM come TM with 6-book
'The girl has come with books'
 - c. *Va- phay- ile ti-nyume*
2SM sow TM 10-peanut
'They have sowed peanuts'
 - d. *Di-horana di- won- i va-ngana*
5-girl 5SM see TM 2-friend
'The girl has seen friends'

- e. *Va-anana va- sakan-i ni mafu*
 2-child 2SM play TM with 6 sand
 ‘The children have played with sand’
- f. *Va- da- te mi-nyoka (< ku-daya)*
 2SM kill TM 4-snake
 ‘They have killed snakes’
- g. *Ndzuma yi- n- ite*
 9 rain 9SM rain TM
 ‘It has rained, the rain’
- h. *Va- bhand- ile mi-hingano*
 2SM demarcate TM 4-boundary
 ‘They have fixed boundaries’
- i. *Va- tand- i ku-xav-a di-buku*
 2SM fail TM 15-buy-FV 5-book
 ‘They have failed to buy a book’
- j. *Di-horana di- bha- te papilo (< ku-bhala)*
 5-girl 5SM write TM 9 letter
 ‘The girl has written a letter’
- k. *Hi- khotw- e ka Cidzimu (< ku-kholwa)*
 1PL SM believe TM in 7 God
 ‘We have faith in God’

From these examples, the following observations can be made:

- **-ile** is a regular perfect end form in the sense that it is much used. However, verbs with identical segments present different ending forms. For instance, while in (115h) *-bhand* ‘demarcate’ selects *-ile*, in (115i) *-tanda* ‘fail’ selects *-i*. This distinction seems to be linked to the tonal structure of each verb: *-bhand* ‘demarcate’ is low-toned (LL) whereas *-tanda* ‘fail’ is high-toned (HH). The facts suggest that *-ile* does not occur with high-toned verbs in Cilenge.
- The suffix **-ite** is employed with monosyllabic verb roots only, as in *-n-* ‘rain’ in (115g). Exceptionally, when the verb root is the plosive alveolar voiceless *-t-* it combines with the regular perfect tense marker *-ile*, as in (115b).
- **-te** occurs often with verb roots ending in the lateral alveolar /l/, as *-bhal-* ‘write’ in (115j) and *-kholw-* ‘believe’ in (115k). It should be noted that the verb root is shortened through the regressive assimilation: /l/ is always assimilated by /t/ of

the tense marker *-te*. As seen, *-bhal-* ‘write’ becomes *-bha-* at the surface realization, in (115j). In (115k), after the assimilation of /l/ in *-kholw-* ‘believe’, the consonant /t/ of the tense suffix is transposed to the root and *-e* remains as the only tense sign, in order to restore the canonical CV syllable form (*kho-twe*). The example in (115f) shows that high-toned verbs which roots end in /y/ select *-te*, such as *-day-* ‘kill’ (HH). On the contrary, *-phay* ‘sow’ in (115c), as is low-toned verb (LL), uses *-ile*. The facts suggest that *-te* is employed with verb roots ending in a lateral /l/ and with high toned verbs ending in /y/.

- *-i* is regularly used with verb roots ending in the nasal alveolar /n/, as seen in (115d) *-won-* ‘see’ and in (115e) *-sakan-* ‘play’.

4.1.2.2 Exclusive past

When focusing on a single action, i.e. excluding any other possible action, the tense prefix *-to-* is employed following the subject marker and may signify "just/only/simply". Consider the example in (116).

- (116) *Va- lek- e, va- to- yi- rol- a male*
 2OM leave IMP 2SM TM 9OM find FV 9 money
 ‘Leave them, [because] they have simply found it, the money’

The example denotes that there is no other action or possibility; they just found money by chance.

4.1.2.3 Remote past

As in other Bantu languages, Cilenge can express that an action took place long [years] ago. Thus, the prefix tense marker *-tanga-* is used following the subject marker. This is illustrated below.

- (117) *Kokwani a- tanga- fuy- a ti-nvhuta*
 1a grandfather 1SM TM raise FV 10-sheep
 ‘My grandfather raised sheeps long ago’

4.1.2.4 Anterior past

Anterior past denotes that an action is prior to another or that the action took place at a relatively distant time in relation to the utterance. It is formed by means of two morphemes one of which follows the SM and the other placed at the end: *-ti-* ... *-ile* (*-ite*, *-te*, *-i*) or *-di-* ... *-ile* (*-ite*, *-te*, *-i*). The prefix *-di-* occurs when the clause occupies a

second position (as subordinate clause), whereas the prefix *-ti-* is used with the main clause. Each prefix must co-occur with a suffix (*-ile*, *-ite*, *-te* or *-i*), as illustrated below.

- (118) a. *U- va- man- i va- di- xav- ile ma-pawa*
 2SG SM 2OM meet PST 2SM TM1 buy TM2 6-bread
 ‘When you met them, they had already bought breads’
- b. *Va- ti- wuk- ile n'-kama wu ni- nga- hok- a*
 2SM TM1 wake TM2 3-time 3rc 1SG SM PST arrive FV
 ‘They had already woken, at the time I arrived’

As seen, the subordinate clause in (118a) appears with *-di-*, whereas the main clause in (118b) recurs to *-ti-*. TM1 (*-ti-* or *-di-*) follows the SM, whereas TM2 (*-ile*, *-ite*, *-te*, *-i*) is located at the end. These allomorphs are subject to the conditions detailed in (115) above.

4.1.2.5 Past continuous

For describing distinct events or activities being taken up over a period, in Cilenge, the continuous manner is shown with the prefix tense marker *-ti-* following the subject marker. With monosyllabic verbs the prefix *-ti-* may occur reduplicated as in (119c). This is illustrated in the following sentences.

- (119) a. *Kale va- ti- xav- a pahla ngu ti-khusu*
 adv. old 2SM TM buy FV 9cloth with 10-mafura
 ‘In times past, they were buying clothes using mafuras’^v
- b. *A- ti- lwal- a ngu dhari*
 1SM TM ill FV with 9 malaria
 ‘S/he was suffering from malaria’
- c. *Hi- ti-ti- dy- a ngu kw- enel- a*
 1PL SM TM eat FV as 15-enough-FV
 ‘We were having plenty to eat’

4.1.2.6 Narrative past

The narrative past describes a chain of past events commonly in story-telling. It is a homograph with the present with focus: both are characterized by having zero tense sign (*-Ø-*). However, a narrative past may occur without an object NP and is distinguished by a high-toned subject marker. This high tone is regularly spread on the syllables of the

verb stem. Arguably, the narration of past events in order of time (or as a result) is based on the high tone as there is no other feature signaling the past time, as shown below.

- (120) a. *Ni- gwit- ile ku- bhik- a ní- sákán- a*
 1SG SM finish PST 15 cook FV 1SG SM play FV
 'I finished cooking and then I played'
- b. *A- hi- kombel- a hí- túmél- a*
 1SM 1PL OM ask FV 1PL SM accept FV
 'S/he asked us [a favour] and then we accepted'

As observed from the examples, in this environment the tone exerts an important role for indicating tense. This is in accordance with Guthrie (1948:72), who states that "[tone] sometimes is the only distinguishing feature in tense formation".

4.1.2.7 Emphatic past

For conveying intensity or prominence through the verb structure, Cilenge employs the prefix *-so-* following the subject marker. According to the context, the sentence may express spontaneity, facility or quickness in the past, as shown in the examples below.

- (121) a. *Ni- won- i ma-buku ni- so- xav- a*
 1SG SM see PST 6-book 1SG SM TM buy FV
 'I saw books and immediately I bought [them]'
- b. *Ni- khige- te di-timba di- so- pful- ek- a*
 1SG SM lean PST 5-door 5SM TM open STAT FV
 'I leaned against the door, and it opened itself spontaneously'

The example in (121a) denotes quickness. In (121b) the emphatic form denotes spontaneity. As seen, emphatic past occurs in subordinate clauses.

As seen, in Cilenge, there are various past tense markers linked to the different realizations of events or activities in the past. As a result of a wide variety of meanings, seven past tenses were presented and could be signed by the following morphemes: *-ile* (*-ite*, *-te*, *-i*); *-ti-* ... *-ile* (*-ite*, *-te*, *-i*) or *-di-* ... *-ile* (*-ite*, *-te*, *-i*); *-to-*; *-tanga-*; *-ti-*; *-Ø-*; *-so-*. It was seen that there are degrees of past, especially the remote past tense.

4.1.3 Future tense

The future tense expresses that the event is subsequent to the moment of speaking. Cilenge displays two discrete futures: (i) Close future formed by means of using the tense marker *-na-* following the subject marker; (ii) distant future formed by means of using two tense formatives which are combined in one compound tense marker. The first element consists of the future tense marker *-na-* and the second element encodes information on “before” or “later”. All tense markers are placed after the subject marker. Consider the following examples.

- (122)
- a. *Va-fana va- na- vat- a ti-ngalava*
2-boy 2SM TM carve FV 10-canoe
‘The boys will carve canoes’
 - b. *Va- na- ta- vat- a ti-ngalava, va- ci- na- wiy- a*
2SM TM1TM2 carve FV 10-canoe 2SM COND FUT come FV
‘They will carve canoes when they come back’
 - c. *Va- na- ya- vat- a ti-ngalava, va- di- hok- ile ka tate*
2SM TM1TM2 carve FV 10-canoe 2SM COND arrive PST LOC 1father
‘They will carve canoes after they have arrived at father’s home’
 - d. *Hi- na- nga- vat- a mbiya, hi- na- va- lomb- a ci-khwa*
1PL SM TM1TM2 carve FV 9 plate 1PL SM FUT 2OM lend FV 7-knife
‘We shall carve the wooden plate, and then we shall lend them a knife’

In (122a) the tense prefix *-na-* normally indicates close future. For expressing the idea of “later”, the future tense marker *-na-* is followed by an itive marker *-ya-*, as in (122c) or by a ventive marker *-ta-*, as in (122b). The data suggest that the compound *-na-ta-* is a ventive form of future, whereas the compound *-na-ya-* is an itive form, both expressing the idea of “later”. This kind of future should be labelled **distant future**, in the sense that the action or event will be completed after another future action. On the other hand, when denoting “before”, the future tense marker *-na-* is followed by *-nga-*, as seen in (122d). Thus, the sentence in (122d) should be translated as “We shall lend them a knife after we have carved the wooden plate”. The compound *-na-nga-* encodes information on “before” and it should be labelled **future anterior**, in the sense that the action or event will be completed before another future action.

With reference to the time of utterance, Cilenge presents (i) immediate future (signed by the tense prefix *-na-*) and (ii) distant future either expressing the idea of “later” (signed by the compounds *-na-ta-* or *-na-ya-*) or the idea of “before” (signed by the compound *-na-nga-*).

After discussing the tense markers in present, past and future of indicative, the next subsections will deal with tense marking in special cases, namely subjunctive, conditional, potential and relative constructions.

4.1.4 Subjunctive

In Cilenge, the subjunctive is a special case for expressing a purpose or a wish to be a fact. It is characterized by *-na-* following the subject marker and *-e* at the end, as illustrated in the following examples.

- (123) a. *N’koma a- na- mah- e ku-rand-a!*
 1God/King 1SM TM do TM 15-love-FV
 ‘God’s will be done!’
- b. *Cidzimu ci- na- ku- katek- is- e!*
 7God 7SM TM 2SG OM be lucky CAUS TM
 ‘God bless you!’

As seen, the first tense marker *-na-* follows the subject marker and the second tense marker *-e* occupies the last position. The first element (*-na-*) may be considered a morpheme that expresses futurity, whereas the ending element (*-e*) expresses the mood.

4.1.5 Conditional

For "expressing or implying a condition or supposition" (Doke 1935:75), Cilenge resorts to a wide range of strategies. If the reference is the present, the tense marker is *-ci-* following the subject marker. Consider the examples in (124).

- (124) *Va- ci- hi- nik- a nyama h- a- dy- a*
 2SM TM 1PL OM give FV 9 meat 1PL SM PRES eat FV
 ‘If they give us meat, we eat (it)’

In the example, the tense marker *-ci-* is in the subordinate clause and it is related to the present time, in the main clause. The sentence should mean “whenever they give us meat we eat it”.

When an action is taken as an expected result in the future, i.e., if the action expresses a sufficient condition, the tense marker is **-co-** following the subject marker. This is reinforced by the future tense marker **-na-** in the main clause, as illustrated below.

- (125) *Va- co- khutal- a, va- na- pas- a*
 2SM TM devote FV, 2SM FUT pass FV
 ‘If they devote [themselves] (to study), they will pass/succeed’

On the other hand, the reference to the future when denoting hypothetical condition is expressed by the use of two tense markers in complementary distribution: **-ndi-** or **-ti-**. The formative **-ti-** occurs at the subordinate clause and follows the subject marker. The formative **-ndi-** is used with the main clause and is placed between the subject marker and the future tense marker **-na-**. The example in (126) seeks to make this clear.

- (126) *Va- ti- khutal- a, va- ndi- na- pas- a*
 2SM TM devote FV 2SM TM FUT pass FV
 ‘If they devote [themselves] (to study), they would pass/succeed’

The reference to the past time is expressed by means of the tense marker **-di-**. This morpheme follows the subject marker. The reference to the past is reinforced by the past tense marker **-ile** (*-ite, -i, or -te*) in the same verb complex. Consider the examples below.

- (127) a. *Ma- di- hok- ile, hi- na- ma- won- a*
 6SM TM arrive PST 1PL SM FUT 6OM see FV
 ‘If they have arrived, we will see them’
 b. *Va- ti- hi- nik- ile male hi- di- xav- ile*
 2SM TM 1PL OM give PST 9 money 1PL SM TM buy PST
 ‘If they had given us money, we would have bought (it)’

As seen, **-di-** co-occurs with a past tense marker (*-ile, -ite, -te, -i*). In a conditional dubitative construction as in (127a), the morpheme **-di-** is placed in the subordinate clause. In conditional anterior, as in (127b), **-di-** appears in the main clause and is accompanied by **-ti-** in the subordinate clause. In (127b), **-ti-** in the verb *-nika* ‘give’ expresses the condition to be satisfied before the action expressed by the verb *-xava* ‘buy’.

We have observed that the conditional has different tense markers (*-ci-*, *-co-*, *-ndi/ti-*, *-di-*) always following the subject marker. The tense marker *-ci-* is used when the reference is in the present. If the action expresses a sufficient condition, the tense marker is *-co-*. A hypothetic condition in the future is expressed by the use of two tense markers in complementary distribution: *-ndi-* or *-ti-*. The reference to the past time is expressed by means of the tense marker *-di-*.

4.1.6 Relative constructions

Relative constructions appear as clauses used for qualifying an antecedent. In Cilenge, such clauses may be introduced by a relative concord (rc), a link word that establishes co-referentiality with the antecedent through the concord class marker.

The reference to the present time is signalled by the tense marker *-ko* affixed at the suffix slot, i.e. at the last position, as illustrated in the example below.

- (128) *Ni- lav- a va-thu va va- gond- a- ko*
 1SG SM want FV 2-person 2rc 2SM study FV TM
 ‘I want the people who study’

As seen in (128), the tense marker *-ko* always follows the final vowel (fv). The relative concord is *va* because the respective antecedent *vathu* ‘people’ belongs to class 2.

When referring to the future time, the tense marker is expressed by means of *-o-* fused to the future tense marker *-na-*, as seen below.

- (129) a. *C- a- lwal- a ci-wonga ci va- n- o- ci- won- a*
 7SM PRES sick FV 7-cat 7rc 2SM FUT TM 7OM see FV
 ‘It is sick the cat that they will see’
- b. *Awe u- n- o- pwat- ek- a u- na- sal- a*
 you 2SG SM FUT TM absent STAT FV 2SG SM FUT remain FV
 ‘You who will be absent shall remain’

It should be observed that the low vowel [a] in the future tense marker *-na-* drops out in the presence of the relative tense marker *-o-*. Thus, at the surface realization, the two morphemes are bound together forming a single syllable *no*.

When referring to the time in the past, the tense is signalled by the prefix **-nga-** following the subject marker. This is illustrated below.

- (130) *Ti- hok- ile ti-homu ti va- nga- xav- a*
 10SM arrive PST 10-cow 10rc 2SM TM buy FV
 ‘The cattle that you bought have arrived’

The relative construction is introduced by the relative concord *ti*. It bears class 10 because the antecedent *tihom* ‘cows’ is placed in class 10. As it is regarded to the past, the verb *-xava* ‘buy’ takes the tense marker **-nga-** after the subject marker.

We have seen that in relative constructions the reference to the present time is expressed by means of the ending *-ko*, while the reference to the future is presented by the prefix *-o-*, following the future tense marker, and the reference to the past is shown by **-nga-** following the subject marker.

4.1.7 Summary

This section has examined tense marking in verb affirmative forms of Cilenge. In the indicative, we have distinguished four different types of present in terms of expression of tense markers: present with focus expressed by means of zero (Ø) tense marker and an obligatory object NP; present with *-a-* following the SM. Here we demonstrated that the high vowels /i, u/ and the low vowel /a/ linked to the syllable of the subject markers drop before the tense marker, as it is signalled by the vowel /a/, and thus SM and TM appear fused in the same syllable; present with *-o-*. As in the previous type, we also demonstrated that the vowel of the subject marker is omitted when preceding the tense marker represented by the vowel /o/ and, finally, present with compound tense prefix *-a-nga-*. In the present tense, all tense markers follow the subject marker. We have observed that there are seven types of past tense: on the perfect we demonstrated that the occurrence of the ending *-ile*, *-ite*, *-te* and *-i* is subject to the root last consonant, tone and the syllable structure; exclusive past expressed by means of the prefix tense marker *-to-* following the subject marker; remote past signalled by the prefix tense marker *-tanga-*; anterior past expressed by means of two tense markers one in prefix position (*-ti-* or *-di-*) and the other in suffix position (*-ile*, *-ite*, *-te*, *-i*); past continuous indicated by the prefix tense marker *-ti (ti)-*; narrative past characterized by having zero (Ø) tense

marker and a high-toned subject marker; and emphatic past expressed by means of the prefix tense marker *-so-*. We distinguished two different futures: close future, characterized by the prefix tense marker *-na-*, and distant future expressed by two tense markers in the prefix position: (i) *-na-* followed by itive *-ya-* or ventive *-ta-*, or (ii) *-na-* followed by *-nga-* denoting the idea of “before, which could be labelled “future anterior”. We have observed that in the conditional the tense markers (*-ci-*, *-co-*, *-ti-*, *-di-*) always follow the subject marker. Finally, we have observed that in relative constructions the reference to the present time is expressed by means of the ending *-ko*, while the reference to the future is presented by the prefix *-o-*, following the future tense marker, and the reference to the past is shown by *-nga-* following the subject marker. Now we turn to the negative verb forms.

4.2 Negative verb forms

In this section, we examine negative marking in Cilenge verb complex. According to the tense or mood, the negative marker may follow the SM or the TM and may be realized as prefix and suffix simultaneously. First, we discuss negative marker in the indicative mood, namely present, past and future, and then in other verb forms, namely subjunctive, imperative, conditional constructions, relative constructions and infinitive.

4.2.1 Negative present

There are three ways of expressing the negative: (i) one is formed by means of bimorphemic negative markers: *-ka-...-i*, the former following the subject marker and the latter placed after the verb root; (ii) the second is formed by the suffix *-i*, and the last (iii) consists of using the morpheme *-se-* following the subject marker. Consider the following examples.

- (131)
- a. *Va-anana va- ka- sel- i wu-suke*
 2-child 2SM NEG1 drink NEG2 14-liquor
 ‘Children do not drink liquor’
 - b. *Va-anana vá- sel- i wu-suke*
 2-child 2SM drink NEG2 14-liquor
 ‘Children do not drink liquor’
 - c. *Va-anana va- se- gond- a ci-kwolwa*
 2-child 2SM NEG attend FV 7-school
 ‘The children do not attend school yet’

- d. *Va-fana va- ka- se- yak- a nyumba*
 2-boy 2SM NEG1 NEG1 build FV 9 house
 'The boys have not yet built the house'

From the examples, we can observe that in (131a) the prefix **-ka-**, as Neg1, co-occurs with the suffix **-i**, as Neg2. In (131b) the negative is only formed by the suffix **-i**. However, it should be noted that when the Neg1 is omitted, the SM must bear a high tone (here signaled by the acute accent). We exceptionally mark tone to show the fact. The example in (131c) should be labelled "expected negative present" as the negative formative **-se-** means "not yet" i.e. something expected to occur in the future. The example in (131d) shows that the formative **-ka-** may optionally co-occur with the prefix **-se-**. The fact suggests that the former has an emphatic function only.

Negative present in Cilenge exhibits three negation marking strategies: (i) double marking of negation by means of **-ka-...-i**, (ii) final suffix **-i** and (iii) post-initial prefix **-se-**.

4.2.2 Negative past

According to the type of past, negative formatives may occur either in prefix position only or in prefix and suffix position (negative concord), as shown below.

4.2.2.1 Negative perfect

The negative perfect is achieved by means of a single formative **-ya-**, following the subject marker. The negative marker **-ya-** has a free variant **-ka-**.

- (132) a. *Ma-horana ma- ya- kating- a si-haka*
 6-girl 6SM NEG fry FV 8-fish
 'The girls did not fry fish'
- b. *Ma-horana ma- ka- kating- a si-haka*
 6-girl 6SM NEG fry FV 8-fish
 'The girls did not fry fish'

As seen, both the **-ya-** or **-ka-** forms can appear in the same environment without any change in meaning and can freely interchange with each other.

4.2.2.2 Negative anterior past

This construction consists of negative markers *-se-* "not yet" or *-sa-* "not", following the subject marker. Each prefix may be placed after the tense marker when it is present. Consider the following examples.

- (133)
- a. *Ni- hok- ile va- se- wuk- a*
1SG SM arrive PST 2SM NEG awake FV
'When I arrived, they had not awoken yet'
- b. *Va-dimi va- ti- se- khat- a ku-phay-a*
2-cultivator 2SM PST NEG begin FV 15-sow-FV
'The cultivators had not yet begun to sow'
- c. *Yi - chay- a dhina va- se- pful- a ci-tolo*
9SM-ring-FV 12 o'clock 2SM NEG open FV 7-store
'It struck twelve and they had not yet opened the store'
- d. *Nyhanova ma-kholwa ma- ti- sa- tal- a, kambe nyhansi ma- ta- te*
yesterday 6-faithful 6SM-PST-NEG-full-FV but today 6SM-full-PST
'Yesterday faithful were not numerous, but today there are many'

From these examples, it should be observed that there are three types of negative anterior past:

- (i) An "unexpected anterior past" indicating an anomaly. The examples in (133a) and (133c) show that a state or an action should have occurred before. Here, the formative *-se-* exerts two roles: it acts as negative marker and as tense marker simultaneously;
- (ii) The second type indicates that an action was expected to occur in the past, and thus it may be labelled "expected negative anterior past", as in (133b);
- (iii) The third type uses *-sa-* following the tense marker *-ti-*. This form expresses the contrast between an anterior situation or action and the more recent one, as seen in (133d). This is a simple expression of a negative anterior past form.

4.2.2.3 Negative past continuous

The negative is made by means of the bimorphemic negative marker *-si-...-i*. The first negative marker follows the tense marker; the second element is placed at the end, as illustrated below.

- (134) a. *Kale va-anana va- ti- si- sel- i wu-suke*
 adv. old 2-child 2SM PST NEG1 drink NEG2 14-liquor
 'In earlier times, children were not drinking liquor'
- b. *Tate a- ti- si- godhol- i thembwe-ni*
 1afather 1SM PST NEG1 cast NEG2 field-Loc
 'My father was not losing courage in the field'

4.2.2.4 Negative narrative past

The negative narrative past is also obtained through the bimorphemic negative marker -*si-...-i*, with one morpheme following the SM and another morpheme at the end. This form does not have a tense marker. Consider the following examples.

- (135) a. *A- hi- kombe- te ma-dimwa, hi- si- tumel- i*
 1SM- 1PL OM ask PST 6-orange 1PL SM NEG1 accept NEG2
 'He/she asked us for oranges and then we did not accept'
- b. *Hi- won- i n'-nyoka hi- si- wu- day- i*
 1PL SM see PST 3-snake 1PL SM NEG1 3OM kill NEG2
 'We saw a snake and [then] we did not kill it'

As the negative narrative past has no tense affix, it is arguable that the first negative element (NEG1) encodes information on tense.

We have observed that the negative past resorts to a wide range of negation marking strategies, according to the type of past. While the negative perfect is achieved by means of a single formative -*ya-* (with allomorph -*ka-*), the negative anterior past consists of negative markers -*se-* "not yet" or -*sa-* "not". The negative is made by means of the prefix -*si-* (following the TM) and the final -*i*, whilst the negative narrative past is obtained through the post-initial negative marker -*si-* (following the SM) and the final -*i*.

4.2.2.5 Negative future

The negative future is formed by means of the negative prefix marker -*mbi-* following the tense marker, as illustrated in (136).

- (136) a. *Va-anana va- na- mbi- rwal- a ti-phande*
 2-child 2SM FUT NEG carry on head FV 10-stake
 'Children will not carry the stakes on [their] heads'

- b. *Hi- na- mbi- ya- pfluxel- a ma-xaka, hi- se- hol- a*
 1PL SM FUT-NEG-FUT-visit-FV 6-relative 1PL SM-NEG-remunerate-FV
 ‘We will not visit our relatives unless we receive our salaries’

In (136a) the NEG follows the tense marker *-na-*. This is the case of near future. In distant future, as in (136b), Neg is placed between *-na-* and itive or ventive form.

The negative future is formed by means of the prefix marker *-mbi-* for either immediate or distant future.

4.2.2.6 Negative subjunctive

This construction is formed by means of using the negative formative *-nga-* after the subject marker.

- (137) a. *Cidzimu ci- nga- ni- ton- e mathomo*
 7 God 7SM NEG 1SG OM deprive TM 6 luck/fortune
 ‘Hope God does not deprive me [of my] luck’
- b. *Hi- nga- lw- e- ni*
 1PL SM NEG fight TM PL
 ‘Do not let us [all] fight’

The example in (137a) is regarded as subjunctive because it denotes a desire or a wish to be a fact. The example in (137b) expresses an appeal not to fight. Baumbach (1987:232) states that the hortative is a sub-mood of the subjunctive and that it "is used when a friendly request is directed at another person". Taking this statement into account, we can suggest that (137b) is a case of the hortative, because it expresses an invitation or appeal ("let us ...") expressed by a sender involved in the action. As the request is used inclusively, the first person plural subject marker *hi-* is employed. The hortative distinguishes a direct invitation to one, two or more people. In this case, the suffix *-ni* is used as a plural marker of three or more.

The negative subjunctive is signalled by *-nga-* after the subject marker.

4.2.2.7 Negative imperative

Negative commands are expressed by the negative formative *-nga-* following the subject marker. The verb stems end with *-e*, which is the sign of imperative, and can be followed by the plural *-ni*, as shown below.

- (138) a. *U- nga- sakan- e citarato-ni*
 2SG SM NEG play IMP street-Loc
 ‘Do not play at the street’

- b. *Mi- nga- pek- e- ni va-anana*
 2PL SM NEG beat IMP PL 2-child
 ‘Do not beat the children’

As noticed, the negative imperative form presents subject markers of the second person singular or plural preceding the negative marker *-nga-*.

4.2.2.8 Negative conditional constructions

The negative is formed by means of using (i) the negative formative *-sa-* following the tense marker or (ii) the negative formative *-si-*, following the subject marker, co-occurring with the ending *-i* or (iii) the negative formative *-se-* following the subject marker. Consider the examples below.

- (139) a. *Va-anana va- ti- sa- gond- a va- di- repwe- te*
 2-child 2SM COND NEG study FV 2SM COND fail PST
 ‘If the children had not studied they would [have] failed’
- b. *Va-bhiki va -si- bhik- i hi- na- f- a ngu ndzala*
 2-cook 2SM NEG1 cook NEG2 1PL SM FUT die FV by 9 hunger
 ‘If the cooks do not cook we will go hungry’
- c. *U- nga- va- nik- e male vá- se- thum- a*
 2SG SM NEG 2OM give IMP 9 money 2SM NEG work FV
 ‘Do not give them money before they have worked’

In (139a) the negative formative *-sa-* follows the conditional tense marker *-ti-* denoting past events. In (139b) there are two negative morphemes one of which is the negative formative *-si-* and the other is the ending *-i*. It appears that the former encodes information on tense referring to the present time, as in (124) above, and the latter indicates negation only. In (139c) the negative formative *-se-* expresses a condition to be satisfied before an action takes place. Here too, we exceptionally mark high tone to show that the SM must be high-toned. It is arguable that this morpheme exerts two functions simultaneously: tense marker and negative marker.

Cilenge exhibits two negation marking strategies in negative conditional constructions: (i) double marking of negation (the post-initial prefix *-si-* and the final suffix *-i*) and (ii)

single marking negation consisting of the prefix *-sa-* following the tense marker or the prefix *-se-* following the subject marker.

4.2.2.9 Negative relative constructions

The negative relative constructions in Cilenge come in two forms. The first form consists of adding the negative marker *-si-* following the subject marker and replacing the final vowel with the negative marker *-i-* adjacent to the relative marker *-ko*. The second form employs the negative marker *-mbi-* after the relative marker. This is illustrated below.

- (140)
- a. *Hi- lav- a wu a- si- gond- i- ko*
 1PL SM want FV 1rc 1SM NEG1 study NEG2 REL
 ‘We want [to know] who does not attend the school’
 - b. *Va-thu va va- nga- mbi- res- a va- na- tsayis- w- a*
 2-people 2rc 2SM REL NEG tax FV 2SM FUT punish PASS FV
 ‘The people who did not [pay] tax will be punished’
 - c. *Va- komb- e ma-saka ya ma- n- o- mbi- pakel- w- a*
 2OM show IMP 6-sack 6rc 6SM FUT REL NEG load PASS FV
 ‘Show us the sacks which will not be loaded’

When the reference is the present, as in (140a), the negative is expressed by two morphemes one of which is the negative formative *-si-* after the SM and the other is the ending *-i-* preceding the relative marker. When the reference is the past as in (140b) and the future as in (140c), the negative is formed by means of using the negative formative *-mbi-* following the respective relative marker.

The negative relative constructions presents two strategies: (i) double marking (the prefix *-si-* after the SM and the suffix *-i-* adjacent to the relative marker) and (ii) single marking by means of the prefix *-mbi-* (the negative marker appears between the relative marker and the verb root).

4.2.2.10 Negative infinitive

The negative infinitive is formed by means of the negative formative *-ambi-* affixed between the infinitive marker *ku-* and the verb root, as in the following example:

- (141) *kw- ambi- xav- a*
 15 NEG buy FV
 ‘to not buy’

As already noticed in Section 3.1, in the example the class 15 noun prefix *ku-* becomes *kw-* because of the gliding process involving high vowels when they precede any different vowel.

As seen, on the one hand, negation may be expressed by means of two morphemes one following the SM and the other at the end of the verb complex. This is observed in the present, past continuous, narrative past, conditional construction and relative construction related to the present time. On the other hand, negation may be formed by a single negative morpheme as in the perfect, future, subjunctive, imperative, infinitive and other kinds of conditional and relative constructions. After these notes on the negative forms we move on to the analysis of the relationship between tense and negation formative in the next section.

4.3 Relationship between tense markers and negation formatives

While analysing negation marking in the verb complex of Cilenge, we noticed that some constructions appear without an explicit tense marker. This section seeks to examine how the tense is expressed when negative formatives do not co-occur with any specific tense marker. Consider the following examples.

- (142)
- a. Present: *Yimbwa yi- a- dhund- a nyama*
9 dog 9SM TM enjoy FV 9 meat
‘The dog enjoys meat’
 - b. Negative present: *Yimbwa yi- ka- dhund- i ma-tawa*
9 dog 9SM NEG1 enjoy NEG2 6-vegetable
‘The dog does not enjoy greens’
 - c. Perfect: *Ma-horana ma- kating- ile si-haka*
6-girl 6SM fry TM 8-fish
‘Girls have fried fish’
 - d. Negative perfect *Ma-horana ma- yá- kating- a si-haka*
6-girl 6SM NEG fry FV 8-fish
‘The girls have not fried fish’
 - e. Anterior past: *Yi- chay- a dhina a- di- hok- ile*
9SM ring FV 12 o’clock 1SM TM arrive TM
‘It struck twelve and s/he has already arrived’

f. Negative Anterior Past: *Yi-chay-a dhina á- sé- hok- a .*
 9SM ring FV 12 o'clock 1SM NEG arrive FV
 'It struck twelve and s/he has not yet arrived'

g. Conditional: *Ni- ci- bhik- a hi- na- dy- a*
 1SG SM TM cook FV 1PL SM FUT eat FV
 'If I cook we shall eat'

h. Negative conditional: *Va- si- bhik- i va- na- f- a ngu ndzala*
 2SM-TM-cook-NEG 2SM FUT die FV by 9hunger
 'If they do not cook, they will go hungry'

As seen, in (142) some negative elements seem to be related to tense. In (142b) it appears that the negative element **-ka-** replaces the tense marker **-a-** of the present in (142a). The facts suggest that the reference to the present time is expressed by the Neg1. The example in (142d) suggests that the negative element **-ya-** functions as a tense marker too for expressing past events like in (142c). In (142f) the negative element **-sé-** not only expresses negation but also the tense reference. This fact suggests that a single negative element can express one or two information. While in (142g) the tense marker is **-ci-** for expressing conditional, in (142h) the negative morpheme **-si-** appears to express tense and negation simultaneously. The next section presents the summary of the discussion on tense and negation in the Cilenge verb complex.

4.4 Summary

In this chapter, we have discussed tense and negation marking in the Cilenge verb complex. In affirmative forms, we have distinguished different types of present tense (present with focus, habitual present, present continuous and present progressive) where the tense marker occurs respectively as zero (\emptyset), **-a-**, **-o-** and **-a- -nga-** always following the SM. It was shown that the past not only comprises degrees of remoteness and anteriority but also encodes information on exclusion, emphasis, succession and continuity. We presented the occurrence of bimorphemic tense markers with one morpheme in prefix position and another morpheme in suffix position or both in prefix position. We discussed the relationship between the tense markers (**-ile-**, **-ite-**, **-te-**, **-i-**) used in the perfect and tonal characteristics of the verb, the syllable structure of the verb stem and the final consonant of the verb root. We distinguished close future presented by the tense marker **-na-** and distant future expressed by tense marker **-na-** followed by

itive or *ventive* markers. We examined how the tense markers are expressed in subjunctive, conditional and relative constructions either in prefix position or in suffix position. In negative forms, we discussed different types of negative markers in present, past, future, subjunctive, imperative, infinitive, conditional and relative constructions and we examined the occurrence of two negative morphemes one in prefix position and the other in suffix position in present, past, conditional and relative constructions. To end, we analysed the relationship between tense and negative markers. It was shown that negative elements may appear related to tense. It is concluded from the data that affixes in verb complex may follow this distribution: SM-TM-NEG-OM-RAD-EXT-Final-Suffix.

Chapter Five: Conclusions

5.1. Conclusion

The main purpose of this study was to examine the tense and negation markers in the Cilenge verb, paying attention to the strategies used to indicate negation and the various tenses, and their interaction in the verbal structure. First of all, the study sought to describe the linguistic situation of Mozambique and the role and place of the Bantu languages in the country with special reference to Cilenge.

The verbal structure of the Bantu languages was taken as a reference point for establishing the following verb structure of Cilenge: **Subject-T(A) -Negative-Object-root-Extension(s)-Final-Suffix**. On the one hand, it has been found that some tense markers are single morpheme prefixes, others are single morpheme suffixes, and still others are two morpheme prefixes following each other, or two morphemes one of which is a prefix and the other a suffix. Thus, affirmative tabular tenses can be summarized as follows:

Table 4: Sequence of affixes of affirmative forms

	SM	TM1	TM2	Rad	TM3	TM4
Present with focus	<i>ni</i>			<i>xav</i>	<i>a</i>	
Habitual Pres	<i>n</i>	<i>a</i>		<i>xav</i>	<i>a</i>	
Pres Continuous	<i>n</i>	<i>o</i>		<i>xav</i>	<i>a</i>	
Pres Progressive	<i>n</i>	<i>a</i>	<i>nga</i>	<i>xav</i>	<i>a</i>	
Close Future	<i>ni</i>	<i>na</i>		<i>xav</i>	<i>a</i>	
Distant Fut	<i>ni</i>	<i>na</i>	<i>ta/ya</i>	<i>xav</i>	<i>a</i>	
Fut Anterior	<i>ni</i>	<i>na</i>	<i>nga</i>	<i>xav</i>	<i>a</i>	

Past Perfect	<i>ni</i>			<i>xav</i>	<i>ile</i>
Exclusive	<i>ni</i>	<i>to</i>		<i>xav</i>	<i>a</i>
Remote	<i>ni</i>	<i>ta</i>	<i>nga</i>	<i>xav</i>	<i>a</i>
Anterior	<i>ni</i>	<i>ti</i>		<i>xav</i>	<i>ile</i>
Continuous	<i>ni</i>	<i>ti</i>		<i>xav</i>	<i>a</i>
Narrative	<i>ní</i>			<i>xav</i>	<i>a</i>
Emphatic	<i>ní</i>	<i>so</i>		<i>xav</i>	<i>a</i>
Subjunctive	<i>ni</i>	<i>na</i>		<i>xav</i>	<i>e</i>
Conditional Present	<i>ni</i>	<i>ci</i>		<i>xav</i>	<i>a</i>
Future	<i>ní</i>	<i>co</i>		<i>xav</i>	<i>a</i>
Past	<i>ní</i>	<i>to</i>		<i>xav</i>	<i>a</i>
Hypothetic	<i>ní</i>	<i>ti</i>		<i>xav</i>	<i>a</i>
Potential	<i>ní</i>	<i>ci</i>	<i>nga</i>	<i>xav</i>	<i>a</i>
Anterior	<i>ní</i>	<i>ti</i>		<i>xav</i>	<i>ile</i>
Dubitative	<i>ni</i>	<i>dí</i>		<i>xav</i>	<i>ilé</i>
Relative Present	<i>ní</i>			<i>xav</i>	<i>a</i> <i>kó</i>
Past	<i>ni</i>	<i>nga</i>		<i>xav</i>	<i>a</i>
Future	<i>ní</i>	<i>n</i> <i>o</i>		<i>xav</i>	<i>a</i>

On the other hand, it has been found that negative markers are single morpheme prefixes or suffixes, or two morphemes one of which in prefix position and the other in suffix position. Thus, the study has established that Cilenge employs three strategies for negation: (i) negative concord; (ii) post-initial (here, the negative element may follow the subject marker or the tense marker, according to the time). The post-initial may occur as simplex or complex (with two prefixes); (iii) post-verbal, shown in the negative present. In this case, however, it should be observed that the tone reinforces the expression of negation. These can be summarized as shown in Table 5 below.

Table 5: Sequence of affixes of negative forms

	SM	TM	Neg1	Neg1 TM	RAD	Neg2	TM
Present	<i>ni</i>		<i>ka</i>		<i>xav</i>	<i>i</i>	
Expected	<i>ní</i>				<i>xav</i>	<i>i</i>	
	<i>ni</i>		<i>ka</i>	<i>se</i>	<i>xav</i>		<i>a</i>
	<i>ni</i>			<i>sé</i>	<i>xav</i>		<i>a</i>
Future	<i>ni</i>	<i>na</i>	<i>mbi</i>		<i>xav</i>		<i>a</i>
Distant	<i>ni</i>	<i>na</i>	<i>mbi</i>	<i>ta/ya</i>	<i>xav</i>		<i>a</i>
Past Perfect	<i>ni</i>		<i>yá</i>		<i>xav</i>		<i>a</i>
Anterior	<i>ni</i>	<i>ti</i>	<i>se</i>		<i>xav</i>		<i>a</i>
Continuous	<i>ni</i>	<i>ti</i>	<i>si</i>		<i>xav</i>	<i>i</i>	
Narrative	<i>ní</i>		<i>si</i>		<i>xav</i>	<i>i</i>	
Subjunctive	<i>ni</i>		<i>nga</i>		<i>xav</i>		<i>e</i>
Conditional Present	<i>ni</i>		<i>si</i>		<i>xav</i>	<i>i</i>	
Future	<i>ní</i>		<i>se</i>		<i>xav</i>		<i>a</i>
Past	<i>ní</i>		<i>sa</i>		<i>xav</i>		<i>a</i>

Relative Present	<i>ni</i>		<i>si</i>	<i>xav</i>	<i>i</i>	<i>ko</i>
Future	<i>ni</i>	<i>no</i>	<i>mbi</i>	<i>xav</i>		<i>a</i>
Past	<i>ni</i>	<i>nga</i>	<i>mbi</i>	<i>xav</i>		<i>a</i>
Imperative	<i>u</i>		<i>nga</i>	<i>xav</i>		<i>e</i>

Owing to the reduced number of morphemes indicating tense and negation, it has been observed that the use of the same morpheme for multiple contexts is recurrent. Also, it has been observed that, by varying the pitch at the syllables, the tone can be the unique feature for expressing tense or negation. The verb roots determine the type of suffix tense markers in the perfect tense.

It has been observed that Cilenge has wide categories of the past: remote past (which could be termed aorist past), emphatic past, narrative past, anterior past, exclusive past, past continuous, and perfect. We also observed that the present appear as focused, habitual, continuous and progressive, and the future may be close or distant.

Finally, the study has examined the relationship between negative elements and tense markers. The analysis has revealed that negative markers may encode information on tense too.

5.2 Further research

This new study on Cilenge seeks to deepen the verb structure analysis and its scope could not allow a comprehensive examination of all aspects of the verbal complex, with special emphasis on the category aspect and tone by virtue of their great influence on tense and negation marking respectively. These could form the basis for further studies, including the Cilenge phonology.

BIBLIOGRAPHY

- Bailey, R. 1976. Copi phonology and morphotonology. Unpublished B. A. Hons dissertation. Johannesburg: University of Witwatersrand.
- Barca, A. & Santos, T. 2005. *Geografia de Moçambique-física e económica (10^a classe)*, 3rd edn. Maputo: Diname.
- Baumbach, E. J. M. 1987. *Analytical Tsonga grammar*. Pretoria: University of South Africa.
- Bleek, W. H. I. 1862. *A comparative grammar of South African languages*. Part I (Phonology). Cape Town and London: J. C. Juta and Trüber & Co.
- Bybee, J. L. 1985. *Morphology: a study of the relation between meaning and form*. Amsterdam/Philadelphia: John Benjamins Publishing Company.
- Chimbutane, F. 2011. *Rethinking bilingual education in postcolonial contexts*. Bristol: Multilingual Matters.
- Clark, E. V. 1993. *The lexicon in acquisition*. Cambridge: Cambridge University Press.
- Comrie, B. 1985. *Tense*. Cambridge: Cambridge University Press.
- Contreras, H. 1969. Vowel fusion in Spanish. *Hispania* 52(1): 6062.
- Crystal, D. 1992. *Introducing linguistics*. New York: Penguin Books.
- Devos, M. & van der Auwera, J. 2009. *Jespersen cycles in Bantu: double and triple negation*. Ms. Royal Museum for Central Africa & University of Antwerp.
- Dias, H. 2009. *Saberes docentes e formação de professores na diversidade cultural*. Maputo: Imprensa Universitária.
- Doke, C. M. 1992. *Textbook of Zulu grammar*, 6th edn (1st 1927). Cape Town: Maskew Miller Longman.
- _____. 1945. *Bantu: modern grammatical, phonetical and lexicographical studies since 1860*. London: International African Institute.
- _____. 1935. *Bantu linguistic terminology*. London: Longmans, Green and Co.
- Faria, I., Pedro, E., Duarte, I. & Gouveia, C. (eds.). 1996. *Introdução à linguística geral e portuguesa*, 2nd edn. Lisboa: Caminho.
- Finch, G. 2003. *How to study linguistics: a guide to understanding language*, 2nd edn (1st 1997). New York: Palgrave Macmillan.
- _____. 2000. *Linguistic terms and concepts*. London: Macmillan Press.

- Fromkin, V. (editor), Hayes, B., Curtiss, S., Szabolesi, A., Stowel, T., Stabler, E., Sportiche, D., Koopman, H., Keating, P. Munro, P., Hyams, N. & Steriade, D. 2000. *Linguistics: an introduction to linguistic theory*. Malden, Massachusetts: Blackwell Publishers.
- Gonçalves, P. 1996. *Português de Moçambique: uma variedade em formação*. Maputo: Livraria Universitária e Faculdade de Letras da U.E.M.
- Gowlett, D. 2003. Zone S, in *The Bantu languages*, edited by D. Nurse & G. Philippson. London and New York: Routledge: 609-638.
- Güldemann, T. & Hagemeyer, T. 2006. *Negation in the Gulf of Guinea creoles: typological and historical perspectives*. Talk delivered at the annual ACBLPE meeting, Coimbra.
- Guthrie, M. 1971. *Comparative Bantu. the comparative linguistics of the Bantu languages*. Vol. 2, part I. London: Gregg Press.
- _____. 1967. *Comparative Bantu. the comparative linguistics of the Bantu languages*. Vol. 1, part I. London: Gregg Press.
- _____. 1948. *The classification of the Bantu languages*. London: Oxford University Press.
- Hendrikse, R. and Poulos, G. 2006. Tagging an agglutinating language: a new look at word categories in the Southern African indigenous languages. *Language Matters* 37(2): 246-266.
- Hyman, L. M. 2007. Niger-Congo verb extensions: overview and discussion, in *Selected Proceedings of the 37th Annual Conference on African Linguistics*, edited by D.L. Payne and J. Peña. Somerville, MA: Cascadia Proceedings Project: 149-163.
- Instituto Nacional de Estatística (INE). 2010a. *III recenseamento geral da população e habitação 2007: resultados definitivos- Moçambique*. Maputo: INE.
- _____. 2010b. *III recenseamento geral da população e Habitação 2007: indicadores sócio-demográficos-Moçambique*. Maputo: INE.
- _____. 2009. *Sinopse dos resultados definitivos do 3^o recenseamento geral da população e habitação: província de Gaza*. Maputo: INE.
- Johnston, H. Sir. 1919. *A comparative study of Bantu and semi-Bantu languages*. Oxford: Clarendon Press.

- Junod, H. P. [1933]. *Éléments de grammaire tchopi (M'chopes)*. Lisboa: Sociedade de Geografia de Lisboa.
- Kamba Muzenga, J. G. 1981. *Les formes negatives des langues Bantoues*. Tervuren: Musée Royal de l'Afrique Central.
- Katamba, F. 1993. *Morphology*. London: The Macmillan Press.
- Katupha, M. 2000. Discurso de abertura proferido por S. Exa. O Ministro da Cultura, Juventude e Desportos, in *Relatório do II seminário sobre a padronização da ortografia de línguas Moçambicanas*, edited by B. Siteo and A. Ngunga. Maputo: NELIMO: 5-11.
- Lafon, M. 2006. Mozambique : vers la reconnaissance de la réalité plurilingue par l'introduction de l'éducation bilingue, in *Langues, Cultures e Développement en Afrique*, edited by H. Tourneux. Paris: Karthala: 217-250.
- Lopes, A. J. 2004. *A batalha das línguas:perspectivas sobre linguística aplicada em Moçambique*. Maputo: Imprensa Universitária, UEM.
- _____. 1997. *Language policy: principles and problems*. Maputo: Livraria Universitária.
- Maheme, A. E.2010. Viva o Txitxopi e morra o “Cicopi”! *Notícias* 19-20 July, 2010: 5.
- Maho, J. 2003. A classification of the Bantu languages: an update of Guthrie's referential system, in *The Bantu Languages*, edited by D. Nurse & G. Philippson. London and New York: Routledge: 639-651.
- _____. 2001. *African languages country by country: a reference guide*, 5th edn (1st 1997). Göteborg: Göteborg University.
- Malete, E. N. 2003a. The syntax and morphology of the negative morpheme /ha/ in Sesotho. *South African Journal of African Languages* 23(1): 26-36.
- _____. 2003b. Subject negation in Sesotho subordinate clauses. *South African Journal of African Languages* 23(4): 189-198.
- Mário, M., Buendia, M., Kouwenhoven, W., Alberto A. & Waddington, C.. 2002. *Review of education sector analysis in Mozambique, 1990-1998*. Paris: Working Group on Education Sector Analysis.
- Matsinhe, S. 1994. The status of verbal affixes in Bantu languages with special reference to Tsonga: problems and possibilities. *South African Journal of African Languages* 14(4): 163-176.

- Matsinhe, S. & Fernando, M. 2008. A preliminary exploration of verbal affix ordering in Kikongo, a Bantu language of Angola. *Language Matters* 39(2): 332-358.
- Mchombo, S. 2004. *The syntax of Chichewa*. Cambridge: Cambridge University Press.
- Meeussen, A. E. 1967. Bantu grammatical reconstruction. *Africana Linguistica* 3: 79-121.
- Meinhof, C. 1928. *The bases of Bantu philology: lecture delivered at Cape Town in January*. Cape Town: s.n.
- Meinhof, C. & van Warmelo, N. J. 1932. *Introduction to the phonology of the Bantu languages*. Berlin: Dietrich Reimer/Ernest Vohsen.
- Miti, L. 2001. *A linguistic analysis of Cinsenga, a Bantu language spoken in Zambia and Malawi*. Cape Town: CASAS.
- NELIMO. 1989. *I seminário sobre a padronização da ortografia de línguas Moçambicanas*. Maputo: INDE/UEM-NELIMO.
- Ngunga, A. 2000. *Phonology and morphology of the Ciao verb*. Stanford: CSLI Publications.
- Ngunga, A. & Faquir, O. 2011. *Padronização da ortografia de línguas Moçambicanas: relatório do III seminário*. Maputo: Centro de Estudos Africanos (CEA).
- Nhantumbo, N. 2009. Morfofonologia da marca do passado na língua Copi, in *Lexicografia e Descrição de Línguas Bantu*, edited by A. Ngunga. Maputo: Centro de Estudos Africanos: 127-136.
- Nida, E. 1976. *Morphology: the descriptive analysis of word*, 2nd edn. Ann Arbor: The University of Michigan Press.
- Nurse, D. 2007. Did the proto-Bantu verb have a synthetic or an analytic structure? *SOAS Working Papers in Linguistics* 15: 239-256.
- _____. 2003. Aspect and tense in Bantu languages, in *The Bantu Languages*, edited by D. Nurse & G. Philippson. London and New York: Routledge: 90-102.
- Nurse, D. & Philippson, G. (eds). 2003. *The Bantu Languages*. London and New York: Routledge.
- Radford, A., Atkinson, M., Britain, D., Clahsen, H. & Spencer, A. 1999. *Linguistics, an introduction*. Cambridge: Cambridge University Press.
- Ribeiro, P. A. 1965. *Gramática Changana (Tsonga)*. [S.l]: Editorial “Evangelizar”.
- Rose, S., Beaudoin-Lietz, C. & Nurse, D. 2002. *A glossary of terms for Bantu verbal categories, with special emphasis on tense and aspect*. Muenchen: LINCOM Europa.

- Santos, L. F. 1941. *Gramática da língua Chope*. Lourenço Marques: Imprensa Nacional de Moçambique.
- Schram, J. L. & Pike, E. V. 1978. Vowel fusion in Mazatec of Jalapa de Diaz. *International Journal of American Linguistics* 44(4): 257-261.
- Sitoe, B. 2001. *Verbs of motion in Changana*. Leiden: Research School CNWS.
- _____. 1996. *Dicionário Changana-Português*. Maputo: INDE.
- Sitoe, B. & Ngunga, A. (eds.). 2000. *Relatório do II seminário sobre a padronização da ortografia de línguas Moçambicanas*. Maputo: NELIMO.
- Smyth, W. E. & Matthews, J. 1902. *A vocabulary with a short grammar of Xilenge, the language of the people commonly called Chopi, spoken on the east coast of Africa between the Limpopo River and Inhambane*. London: Society for Promoting Christian Knowledge. Available in <http://books.google.com/books?id=k4MOAAAAYAAJ&oe=UTF-8> [Accessed on 10 August 2011].
- Spencer, J. 1974. Colonial language policies and their legacies in sub-Saharan Africa, in *Advances in Language Planning*, edited by J. Fishman. The Hague: Mouton: 163-175.
- Tanda, V. A. & Neba, A. N. 2005. Negation in Mokpe and two related coastal Bantu languages of Cameroon. *African Study Monographs* 26(4): 201-219.
- Thiong'o, N. 1977. *Decolonising the mind: the politics of language in African literature*, 7th edn (1st 1986). Oxford: James Currey Ltd.
- Zanuttini, R. 1997. Negation and verb movement, in *The New Comparative Syntax*, edited by L. Haegeman. London New York: Longman: 214-245.

Appendix

In appendix A and appendix B, the same 15 verbs are examined. These verbs are organized according to the (i) syllables of the stem, (ii) the kind of tone involved in the stem, and (iii) the radical last consonant, with special relief on that ending in *n* and *l*. Red color is used to set off radicals ending in *n*, and green color shows radicals ending in *l*. Within the groups, glosses are presented in *italic*, and the morphemes are assigned to different slots detached in **bold**.

Appendix A Paradigm of affirmative verb forms

	Monosyllabic Verb	Disyllabic verb		Polysyllabic verb	
		High	Low	High	Low
Infinitive	Pref rad fv Ku- p- á <i>'to steal'</i> Ku- n- a <i>'to rain'</i> Ku- lw- a <i>'to fight'</i>	Pref rad fv Ku- rand- á <i>'to love'</i> Ku- won- á <i>'to see'</i> Ku- kul- á <i>'to grow'</i>	Pref rad fv Ku- lumb- a <i>'to pertain'</i> Ku- dhin- a <i>'to knock'</i> Ku- bhal- a <i>'to write'</i>	Pref rad fv Ku- dukét- á <i>'to experiment'</i> Ku- hambán- á <i>'to separate'</i> Ku- khóngél- a <i>'to pray'</i>	Pref rad fv Ku- velek- a <i>'to give birth'</i> Ku- sakan- a <i>'to play'</i> Ku- wulél- a <i>'to enter'</i>
Imperative	Rad fv stab pl P- á- na <i>'Steal up!'</i> - Lw- á- na <i>'Fight!'</i>	Rad fv pl Ránd- a <i>'Love!'</i> Wón- a <i>'See!'</i> Kúl- a <i>'Grow up!'</i>	Rad fv pl Lúmb- a <i>'Pertain!'</i> Dhín- a <i>'Knock!'</i> Bhál- a <i>'Write!'</i>	Rad fv pl Dúkét- a <i>'Experiment!'</i> Hámbán- a' <i>'Separate!'</i> Khóngél- a <i>'Pray!'</i>	Rad fv pl Velék- a <i>'Give birth!'</i> Sakán- a <i>'Play!'</i> Wulél- a <i>'Enter, come in!'</i>
Imperative Plural	P- á- ná- ni -	Ránd- á- ni <i>'Love!'</i> Wón- á- ni <i>'See!'</i>	Lumb- á- ni <i>'Pertain!'</i> Dhin- á- ni <i>'Knock!'</i>	Dúkét- á- ni <i>'Experiment!'</i> Hámbán- á- ni <i>'Separate!'</i>	Velek- á- ni <i>'Give birth!'</i> Sakan- á- ni <i>'Play!'</i>

	Lw- a- ná- ni 'Fight!'	Kúl- á- ni 'Grow up!'	Bhal- á- ni 'Write!'	Khóngél- á- ni 'Pray!'	Wulel- á- ni 'Enter, come in!'
Subjunctive	sm tm1 rad tm2 Vá- ná- p- e 'may they steal' Yí- ná- n- e 'may it rain' Á- ná- lw- e 'may s/he fight'	sm tm1 rad tm2 Vá- na- ránd- e 'may they love' Vá- na- wón- e 'may they see' Á- na- kúl- e 'may s/he grow'	sm tm1 rad tm2 Vá- na- lumb- e 'may they pertain' Vá- na- dhín- e 'may they knock' Á- na- bhál- e 'may s/he write'	sm tm1 rad tm2 Vá- na- dúkét- e 'may they experiment' Vá- na- hámbán- e 'may they separate' Á- na- khóngél- e 'may s/he pray'	sm tm1 rad tm2 Vá- na- velék- e 'may they give birth' Vá- na- sakán- e 'may they play' Á- na- wulél- e 'may s/he enter'
Hortative	sm rad tm pl Hí- p- e 'let us steal' - Hí- lw- e 'let us fight'	sm rad tm pl Hí- ránd- e 'let us love' Hí- wón- e 'let us see' Hí- kúl- e 'let us grow'	sm rad tm pl Hí- lumb- e 'let us pertain' Hí- dhín- e 'let us knock' Hí- bhál- e 'let us write'	sm rad tm pl Hí- dúkét- e 'let us experiment' Hí- hámbán- e 'let us separate' Hí- kóngél- e 'let us pray'	sm rad tm pl Hí- velék- e 'let us give birth' Hí- sakán- e 'let us play' Hí- wulél- e 'let us enter'
Hortative plural of three	Hí- p- é- ni 'let us steal' - Hí- lw- é- ni 'let us fight'	Hí- ránd- é- ni 'let us love' Hí- wón- é- ni 'let us see' Hí- kúl- é- ni 'let us grow'	Hí- lumb- é- ni 'let us pertain' Hí- dhín- é- ni 'let us knock' Hí- bhal- é- ni 'let us write'	Hí- dúkét- é- ni 'let us experiment' Hí- hámbán- é- ni 'let us separate' Hí- khóngél- é- ni 'let us pray'	Hí- velel- é- ni 'let us give birth' Hí- sakan- é- ni 'let us play' Hí- wulel- é- ni 'let us enter'
Potential	sm tm rad fv Ni- ngá- p- á 'I can steal' Yi- ngá- n- á 'it can rain' Va- ngá- lw- á 'they can fight'	sm tm rad fv Ni- ngá- rand- á 'I can love' Hi- ngá- won- á 'we can see' Va- ngá- kul- á 'they can grow'	sm tm rad fv A- ngá- lumb- a 's/he can pertain' Hi- ngá- dhín- a 'we can knock' Hi- ngá- bhál- a 'we can write'	sm tm rad fv A- ngá- dukét- á 'he can experiment' Hi- ngá- hambán- á 'we can separate' Hi- ngá- khóngél- a 'we can pray'	sm tm rad fv Hi- ngá- vélek- a 'we can give birth' Hi- ngá- sakan- a 'we can play' Va- ngá- wulel- a 'they can enter'
Conditional	sm tm rad fv Va- cí- p- á	sm tm rad fv A- cí- ránd- á	sm tm rad fv A- cí- lumb- a	sm tm rad fv A- cí- dúkét- á	sm tm rad fv A- cí- velék- a

	<i>‘if they steal’</i> Yi- cí- n- á <i>‘if it rains’</i> A- cí- lw- á <i>‘if s/he fights’</i>	<i>‘if s/he loves’</i> Va- cí- wón- á <i>‘if they see’</i> Va- cí- kúl- á <i>‘if they grow’</i>	<i>‘if s/he pertains’</i> Va- cí- dhín- a <i>‘if they knock’</i> Hi- cí- bhál- a <i>‘if we write’</i>	<i>‘if s/he experiments’</i> Va- cí- hambán- á <i>‘if they separate’</i> Hi- cí- khóngél- a <i>‘if we pray’</i>	<i>‘if she gives birth’</i> U- cí- sákán- a <i>‘if you play’</i> Hi- cí- wúlél- a <i>‘if we enter’</i>
Cond Exclusive Pres	sm tm rad fv Vá- co- p- á <i>‘if they really steal’</i> Yí- co- n- á <i>‘if it really rains’</i> Mí- co- lw- á <i>‘if you really fight’</i>	sm tm rad fv Ní- co- rand- á <i>‘if I really love’</i> Á- co- won- á <i>‘if s/he really sees’</i> Tí- co- kul- á <i>‘if they really grow’</i>	sm tm rad fv Hí- co- lumb- a <i>‘if we really pertain’</i> Vá- co- dhín- a <i>‘if they really knock’</i> Hí- co- bhál- a <i>‘if we really write’</i>	sm tm rad fv Hí- co- dukét- á <i>‘if we really experiment’</i> Vá- co- hambán- á <i>‘if they really separate’</i> Ú- co- khóngél- a <i>‘if you really pray’</i>	sm tm rad fv Á- co- vélek- a <i>‘if she really gives birth’</i> Mí- co- sákan- a <i>‘if you really play’</i> Hí- co- wúlel- a <i>‘if we really enter’</i>
Cond Exclusive Pst	sm tm rad fv Vá- to- p- á <i>‘if they really have stolen’</i> Yí- to- n- á <i>‘if it really has rained’</i> Á- to- lw- á <i>‘if he really has fought’</i>	sm tm rad fv Ní- to- rand- á <i>‘if I really have loved’</i> Á- to- won- á <i>‘if s/he really has seen’</i> Vá- to- kul- á <i>‘if they really have grown’</i>	sm tm rad fv Á- to- lumb- a <i>‘if s/he really has pertained’</i> Hí- to- dhín- a <i>‘if we really have knocked’</i> Vá- to- bhál- a <i>‘if they really have written’</i>	sm tm rad fv Vá- to- dukét- á <i>‘if they really have experimented’</i> Vá- to- hambán- á <i>‘if they really have separated’</i> Á- to- khóngél- a <i>‘if s/he really has prayed’</i>	sm tm rad fv Á- to- vélek- a <i>‘if she really has given birth’</i> Vá- to- sákan- a <i>‘if they really have played’</i> Vá- to- wúlel- a <i>‘if they really have entered’</i>

Cond Hypothetic	sm tm1 tm2 rad fv Vá- ti- tí- p- á ‘if they were stealing’ Yí- ti- tí- n- á ‘if it was raining’ Vá- ti- tí- lw- á ‘if they were fighting’	sm tm rad fv Vá- ti- ránd- á ‘if they were loving’ Hí- ti- wón- á ‘if we were seen’ Á- ti- kúl- á ‘if s/he was growing’	sm tm rad fv Vá- ti- lumb- a ‘if they were pertaining’ Á- ti- dhín- a ‘if s/he was knocking’ Vá- ti- bhál- a ‘if they were writing’	sm tm rad fv Vá- ti- dúkét- á ‘if they were experimenting’ Vá- ti-hámbán-á ‘if they were separating’ Hí- ti- khóngél-a ‘if we were praying’	sm tm rad fv Á- ti- vélék- a ‘if she was giving birth’ Vá- ti- sákán- a ‘if they were playing’ Vá- ti- wúlél- a ‘if they were entering’
Cond potential	sm tm1 tm2 rad fv Vá- ci- ngá- p- á ‘since they steal’ Yí- ci- ngá- n- á ‘since it rains’ Hí- ci- ngá- lw- á ‘since we fight’	sm tm1 tm2 rad fv Á- ci- ngá- rand- á ‘since s/he loves’ Hí- ci- ngá- won- á ‘since we see’ Vá- ci- ngá- kul- á ‘since they grow’	sm tm1 tm2 rad fv Vá- ci- ngá-lumb-a ‘since they pertain’ Vá- ci- ngá- dhín-a ‘since they knock’ Hí- ci- ngá- bhál-a ‘since we write’	sm tm1 tm2 rad fv Vá- ci-ngá-dukét- á ‘since they experiment’ Vá- ci-ngá-hambán-á ‘since they separate’ Mí- ci-ngá-khóngél-a ‘since you pray’	sm tm1 tm2 rad fv Vá- ci- ngá- velek-a ‘since they give birth’ Vá- ci-ngá- sakan-a ‘since they play’ Mí- ci-ngá- wulel-a ‘since you enter’
Cond dubitative	sm tm1 rad tm2 Va- dí- p- ité ‘if they have stolen’ Yí- dí- n- ité ‘if it has rained’ Vá- dí- lw- ité	sm tm1 rad tm2 A- dí- ránd- ilé ‘if s/he has loved’ Va- dí- wón- í ‘if they have seen’ U- dí- kú- té	sm tm1 rad tm2 Va- dí- lumb- ilé ‘if they have pertained’ Hi- dí- dhin- ilé ‘if we have knocked’ A- dí- bha- té	sm tm1 rad tm2 Va- dí- dúkét- ilé ‘if they have experimented’ Va- dí- hámbán-í ‘if they have separated’ Vá- dí- khóngé- té	sm tm1 rad tm2 Hi- dí- velek- ilé ‘if we have given birth’ Va- dí- sakan- í ‘if they have played’ A- dí- wule- té

	<i>‘if they have fought’</i>	<i>‘if you have grown’</i>	<i>‘if s/he has written’</i>	<i>‘if they have prayed’</i>	<i>‘if s/he has entered’</i>
Cond anterior	sm tm1 rad tm2 Vá- tí- p- íté <i>‘if they had stolen’</i> Yí- tí- n- ité <i>‘if it had rained’</i> Hí- tí- lw- ité <i>‘if we had fought’</i>	sm tm1 rad tm2 Á- tí- ránd- ílé <i>‘if s/he had loved’</i> Vá- tí- wón- í <i>‘if they had seen’</i> Ú- tí- kú- té <i>‘if you had grown’</i>	sm tm1 rad tm2 Vá- tí- lumb- ílé <i>‘if they had pertained’</i> Ní- tí- dhin- ílé <i>‘if I had knocked’</i> Á- tí- bha- té <i>‘if s/he had written’</i>	sm tm1 rad tm2 Vá- tí- dúkét- ílé <i>‘if they had experimented’</i> Vá- tí- hámbán-í <i>‘if they had separated’</i> Hí- tí- khóngé- té <i>‘if we had prayed’</i>	sm tm1 rad tm2 Vá- tí- velek- ílé <i>‘if they had given birth’</i> Vá- tí- sakan- í <i>‘if they had played’</i> Mí- tí- wule- té <i>‘if you had entered’</i>
Cond posterior	sm tm1 tm2 rad fv Va- ndí- na- p- á <i>‘they should steal’</i> Yi- ndí- ná- n- á <i>‘it should rain’</i> A- ndí- ná- lw- á <i>‘s/he should fight’</i>	sm tm1 tm2 rad fv U- ndí- na- rand- á <i>‘you should love’</i> Va- ndí- na- won- á <i>‘they should see’</i> Hi- ndí- na- kul- á <i>‘we should grow’</i>	sm tm1 tm2 rad fv Va- ndí- na- lumb- a <i>‘they should pertain’</i> Hi- ndí- na- dhín- a <i>‘we should knock’</i> U- ndí- na- bhál- a <i>‘you should write’</i>	sm tm1 tm2 rad fv Hi- ndí- na- dukét- á <i>‘we should experiment’</i> Va- ndí- na- hambán-á <i>‘they should separate’</i> U- ndí- na- khóngél- a <i>‘you should pray’</i>	sm tm1 tm2 rad fv A- ndí- na- velek- a <i>‘she should give birth’</i> Va- ndí- na- sakan- a <i>‘they should play’</i> Va- ndí- na- wulel- a <i>‘they should enter’</i>
Relative Present	sm rad fv tm Vá- p- a- kó <i>‘they who are stealing’</i> Yí- n- a- kó <i>‘it that is raining’</i>	sm rad fv tm Ú- ránd- a- kó <i>‘you who are loving’</i> Vá- wón- a- kó <i>‘they who are</i>	sm rad fv tm Vá- lumb- a- kó <i>‘they who are pertaining’</i> Hí- dhín- a- kó <i>‘we who are</i>	sm rad fv tm Hí- dúkét- a- kó <i>‘we who are experimenting’</i> Vá- hámbán- a- kó <i>‘they who are</i>	sm rad fv tm Vá- velék- a- kó <i>‘they who are giving birth’</i> Hí- sakan- a- kó <i>‘we who are playing’</i>

Relative Past	<p>Á- lw- a- kó 's/he who is fighting'</p> <p>sm tm rad fv Va- nga- p- á 'they who have stolen'</p> <p>Yi- nga- n- a 'it that has rained'</p> <p>U- nga- lw- a 'you who have fought'</p>	<p>seeing' Hí- kul- a- kó 'we who are growing'</p> <p>sm tm rad fv Hi- nga- rand- á 'we who have loved'</p> <p>Va- nga- won- á 'they who have seen'</p> <p>A- nga- kul- á 's/he who has grown'</p>	<p>knocking' Á- bhál- a- kó 's/he who is writing'</p> <p>sm tm rad fv Va- nga- lumb- a 'they who have pertained'</p> <p>Va- nga- dhin- a 'they who have knocked'</p> <p>Hi- nga- bhal- a 'we who have written'</p>	<p>separating' Á- khóngél- a- kó 's/he who is praying'</p> <p>sm tm rad fv Va- nga- dukét- á 'they who have experimented'</p> <p>Va- nga- hambán- á 'they who have separated'</p> <p>Hi- nga- khóngél- a 'we who have prayed'</p>	<p>Á- wulél- a- kó 's/he who is entering'</p> <p>sm tm rad fv Va- nga- velek- a 'they who have given birth'</p> <p>Hi- nga- sakan- a 'we who have played'</p> <p>A- nga- wulel- a 's/he who has entered'</p>
Relative Future	<p>sm tm1 tm2 rad fv Vá- n- ó- p- á 'they who will steal'</p> <p>Yí- n- ó- n- á 'it that will rain'</p> <p>Ú- n- ó- lw- á 'you who will fight'</p>	<p>sm tm1 tm2 rad fv Vá- n- ó- rand- á 'they who will love'</p> <p>Hí- n- ó- won- á 'we who shall see'</p> <p>Á- n- ó- kul- á 's/he who will grow'</p>	<p>sm tm1 tm2 rad fv Mí- n- ó- lumb- a 'you who will pertain'</p> <p>Vá- n- ó- dhín- a 'they who will knock'</p> <p>Hí- n- ó- bhál- a 'we who shall write'</p>	<p>sm tm1 tm2 rad fv Hí- n- ó- dukét- á 'we who shall experiment'</p> <p>Vá- n- ó- hambán- á 'they who will separate'</p> <p>Á- n- ó- khóngél- a 's/he who will pray'</p>	<p>sm tm1 tm2 rad fv Vá- n- ó- vélék- a 'they who will give birth'</p> <p>Hí- na- ó- sákán- a 'we who shall play'</p> <p>Á- n- ó- wulél- a 's/he who will enter'</p>
Present	<p>sm rad fv Hi- p- á 'we steal/are stealing'</p> <p>Yí- n- á 'it rains/is raining'</p>	<p>sm rad fv U- rand- á 'you love/are loving'</p> <p>Vá- wón- á 'they see/are seeing'</p>	<p>sm rad fv Hi- lumb- a 'we pertain/are pertaining'</p> <p>Á- dhín- á 's/he knocks/is</p>	<p>sm rad fv Hi- dukét- á 'we experiment/are experimenting'</p> <p>Vá- hambán- á 'they separate/are</p>	<p>sm rad fv Vá- vélék- á 'they give/are giving birth'</p> <p>Hi- sakan- a 'we play/are playing'</p>

	<p>Tí- lw- á 'they fight/are fighting'</p>	<p>Hi- kul- á 'we grow/are growing'</p>	<p><i>knocking'</i> Vá- bhál- á 'they write/are writing'</p>	<p><i>separating'</i> Ni- khóngél- á 'I pray/am praying'</p>	<p>Á- wúlél- á 's/he enters/is entering'</p>
Pres Habitual	<p>sm tm rad fv Hi- a- p- á 'we steal' Yí- á- n- á 'it rains' Tí- á- lw- á 'they fight'</p>	<p>sm tm rad fv Hi-a-rand-á 'we love' Vá-a-won-á 'they see' Tí-á-kul-á 'they grow'</p>	<p>sm tm rad fv Hi- a- lumb- a 'we pertain' Vá- a- dhín- a 'they knock' Wu- a- bhál- a 'you write'</p>	<p>sm tm rad fv Hi- a- dukét- á 'we experiment' Vá- a -hambán-á 'they separate' Ni- a-khóngél-a 'I pray'</p>	<p>sm tm rad fv Vá- a- vélék- a 'they give birth' Hi- a- sákan- a 'we play' Yí- á- wúlel- a 'it enters'</p>
Pres Continuous	<p>sm tm rad fv Hi- ó- p- á 'we are stealing' Yí- ó- n- á 'it is raining' Tí- ó- lw- á 'they are fighting'</p>	<p>Sm tm rad fv Hi- ó- rand- á 'we are loving' Vá- ó- won- á 'they are seeing' Tí- ó- kul- á 'they are growing'</p>	<p>sm tm rad fv Hi- o- lumb- a 'we are pertaining' Vá- ó- dhín- a 'they are knocking' Wu- o- bhál- a 'you are writing'</p>	<p>Sm tm rad fv Vá- ó- dukét- á 'they are experimenting' Hi- ó- hambán-á 'we are separating' Ni- ó- khóngél-a 'I am praying'</p>	<p>Sm tm rad fv Vá- ó- vélék- a 'they are giving birth' Hi o- sákan -a 'we are playing' Yí- ó- wúlel- a 'it is entering'</p>
Pres Progressive	<p>sm tm1 tm2 rad fv Hi- a- ngá- p- á 'we are still stealing' Yí- á -ngá- n- á 'it is still raining' Tí- á- ngá- lw- á 'they are still</p>	<p>sm tm1 tm2 rad fv Ni- a- ngá- rand- á 'I am still loving' Vá- a- ngá- won- á 'they are still seeing' Hi- a- ngá- kul- á 'we are still</p>	<p>sm tm1 tm2 rad fv Hi- a- ngá- lumb-a 'we are still pertaining' Vá- a -ngá- dhín -a 'they are still knocking' Ni- a- ngá- bhál- a</p>	<p>sm tm1 tm2 rad fv Hi- a- ngá- dukét-á 'we are still experimenting' Vá- a -ngá-hambán-á 'they are still separating' Ni- a-ngá-khóngél a</p>	<p>sm tm1 tm2 rad fv Hi-a-ngá-vélék-a 'we are still giving birth' Vá-a-ngá-sákán-a 'they are still playing' Yí-á-ngá-wúlél-a</p>

	<i>fighting'</i>	<i>growing'</i>	<i>'I am still writing'</i>	<i>'I am still praying'</i>	<i>'it is still entering'</i>
Future	sm tm rad fv Hi- ná- p- á 'we shall steal' Yí- ná- n- á 'it will rain'	sm tm rad fv Vá- ná- rand- á 'they will love' Hi- ná- won- á 'we shall see'	sm tm rad fv Vá- ná- lumb- a 'they will pertain' Hi- ná- dhín- a 'we shall knock'	sm tm rad fv Vá- ná- dukét- á 'they will experiment' Hi- ná- hambán- á 'we shall separate'	sm tm rad fv Vá- ná- vélék- a 'they will give birth' Hi- ná- sákán- a 'we shall play'
Fut Distant	Tí- ná- lw- á 'they will fight'	Á- ná- kul- á 's/he will grow'	Á- ná- bhál- a 's/he will write'	Á- ná- khóngél- a 's/he will pray'	Yí- ná- wúlél- a 'it will enter'
Fut Anterior	sm tm1 tm2 rad fv Hi- ná- yá- p- á 'we shall (go there to) steal' Yí- ná- tá- n- a 'it will rain (later)' Tí- ná- tá- lw- a 'they will fight (later)' sm tm1 tm2 rad fv Hi- ná- ngá- p- á 'we shall steal before' Yí- na- ngá- n- á 'it will rain before' Tí- na- ngá- lw- á 'they will fight before'	sm tm1 tm2 rad fv Vá- ná- yá- rand- á 'they will (go there to) love' Hi- ná- tá- won- á 'we shall see (later)' Á- ná- tá- kul- á 's/he will grow (later)' sm tm1 tm2 rad fv Vá- na- ngá- rand- á 'they will love before' Hi- ná- ngá- won- á 'we shall see before' Á- na- ngá- kul- á 's/he will grow before'	sm tm1 tm2 rad fv Vá- ná- tá- lumb- a 'they will pertain (late)r' Hi- ná- yá- dhin- a 'we shall (go there to) knock' Á- ná- yá- bhal- a 's/he will (go there to) write' sm tm1 tm2 rad fv Vá- na- ngá- lumb- a 'they will pertain before' Hi- ná- ngá- dhín- a 'we shall knock before' Á- na- ngá- bhál- a 's/he will write before'	sm tm1 tm2 rad fv Vá- ná- tá- dukét- á 'they will experiment (late)r' Hi- ná- yá- hambán- á 'we shall (go there to) separate' Á- ná- tá- khóngél- a 's/he will pray (later)' sm tm1 tm2 rad fv Vá- na- ngá- dukhét- á 'they will experiment before' Hi- ná- ngá- hambán- á 'we shall separate before' Á- na- ngá- khóngél- a 's/he will pray before'	sm tm1 tm2 rad fv Vá- ná- yá- vélék- a 'they will (go to) give birth' Hi- ná- tá- sákán- a 'we shall play (later)' Yí- ná- tá- wúlél- a 'it will enter (later)' sm tm1 tm2 rad fv Vá- na- ngá- vélék- a 'they will give birth before' Hi- ná- ngá- sákán- a 'we shall play before' Yí- na- ngá- wúlél- a 'it will enter before'

Past Perfect	sm rad tm Hi- p- ité ‘we stole/have stolen’ Yí- n- íte ‘it rained/has rained’ Tí- lw- íte ‘they fought/have fought’	sm rad tm Vá -rand- ílé ‘they loved/have loved’ Hi- won- í ‘we saw/have seen’ Á- ku- té s/he grew/has grown’	sm rad tm Vá- lumb- ile ‘they pertained/have pertained’ Hi- dín- ile ‘we knocked/ have knocked’ Á- bhá- te ‘s/he wrote/has written’	sm rad tm Vá- dukét- íle ‘they experimented/have experimented’ Hi- hambán- í ‘we separated/have separated’ Á- khóngé- te ‘s/he prayed/has prayed’	sm rad tm Vá- vele- ile ‘they gave/have given birth’ Hi- sákan- i ‘we played/have played’ Á- wúle- te ‘s/he entered/has entered’
Past Exclusive	sm tm rad fv Hi-tó-p-á ‘we have simply stolen’ Yí-to-n-á ‘it has simply rained’ Tí-to-lw-á ‘they have simply fought’	sm tm rad fv Vá- tó- rand- á ‘they have simply loved’ Hi- tó- won- á ‘we have simply seen’ Á- tó- kul- á ‘s/he has simply grown’	sm tm rad fv Vá- to- lumb- a ‘they have simply pertained’ Hi- tó- dhín- a ‘we have simply knocked’ Á- to- bhál- a ‘s/he has simply written’	sm tm rad fv Vá- tó- dukét- á ‘they have simply experimented’ Hi- tó- hambán- á ‘we have simply separated’ Á- tó- khóngél- a ‘s/he has simply prayed’	sm tm rad fv Vá- to- vélék- a ‘they have simply given birth’ Hi- tó- sákan- a ‘we have simply played’ Á- to- wúlél- a ‘s/he has simply entered’
Past Remote	sm tm1 tm2 rad fv Hi- tá -ngá- p- á ‘we had stolen long ago’ Yí- ta -ngá- n- á ‘it had rained’ Tí- ta- ngá- lw -á	sm tm1 tm2 rad fv Vá- ta- ngá- rand- á ‘they had loved long ago’ Hi- -tá- ngá- won- á ‘we had seen’ Á- ta- ngá- kul -	sm tm1 tm2 rad fv Vá- ta- ngá- lumb- a ‘they had pertained long ago’ Hi- tá- ngá- dhín- a ‘we had knocked’ Á- ta- ngá- bhál- a	sm tm1 tm2 rad fv Vá- ta- ngá- dukét- á ‘they had experimented long ago’ Hi- tá- ngá- hambán- á ‘we had separated’ Á- ta- ngá- khóngél- a	sm tm1 tm2 rad fv Vá- ta- ngá- vélék- a ‘they had given birth long ago’ Hi- tá- ngá- sákan- a ‘we had played’ Á- ta- ngá- wúlél- a

Past Anterior	<p><i>'they had fought'</i></p> <p>sm tm1 rad tm2 Hi- tí- p -ité Hi- dí- p- íte <i>'we had already stolen'</i></p> <p>Yí- tí- n- ité Yi- dí- n- ité <i>'it had already rained'</i></p> <p>Tí- ti- lw- ité Ti- dí- lw -ité <i>'they had already fought'</i></p>	<p>á <i>'s/he had grown'</i></p> <p>sm tm1 rad tm2 Vá -ti- ránd- ílé Va- dí- ránd ílé <i>'they had already loved'</i></p> <p>Hi- tí- wón -í Hi- dí- wón -í <i>'we had already seen'</i></p> <p>Á -tí- kú- té A- dí- kú- té <i>'s/he had already grown'</i></p>	<p><i>'s/he had written'</i></p> <p>sm tm1 rad tm2 Vá- tí- lumb- ílé Va- dí- lumb- ílé <i>'they had already pertained'</i></p> <p>Hi- tí- dhin- ílé Hi- dí- dhin- ílé <i>'we had already knocked'</i></p> <p>Á- tí- bha- té A- dí- bha- té <i>'s/he had already written'</i></p>	<p><i>'s/he had prayed'</i></p> <p>sm tm1 rad tm2 Vá- ti- dúkét- ílé Va- dí- dúkét- ílé <i>'they had already experimented'</i></p> <p>Hi- tí- hámbán-í Hi- dí- hámbán-í <i>'we had already separated'</i></p> <p>Á -ti -khóngé-té A- dí- khóngé-té <i>'s/he had already prayed'</i></p>	<p><i>'s/he had entered'</i></p> <p>sm tm1 rad tm2 Vá- tí- velek- ílé Va- dí- velek- ílé <i>'they had already given birth'</i></p> <p>Hi- tí- sakan- í Hi- dí- sakan- í <i>'we had already played'</i></p> <p>Á- tí- wule- té A- dí- wule- té <i>'s/he had already entered'</i></p>
Past Continuous	<p>sm tm (tm) rad fv Hi- tí- (tí)- p- á <i>'we were stealing'</i></p> <p>Yí- ti- (tí)- n- á <i>'it was raining'</i></p> <p>Tí- ti- (tí)- lw- á <i>'they were fighting'</i></p>	<p>sm tm rad fv Vá- ti- ránd- á <i>'they were loving'</i></p> <p>Hi- tí- wón- á <i>'we were seeing'</i></p> <p>Á- ti- kúl- á <i>'s/he was growing'</i></p>	<p>sm tm rad fv Vá- ti- lumb- a <i>'they were pertaining'</i></p> <p>Hi- tí- dhín- a <i>'we were knocking'</i></p> <p>Á- ti- bhál- a <i>'s/he was writing'</i></p>	<p>sm tm rad fv Vá- ti- dúkét- á <i>'they were experimenting'</i></p> <p>Hi -tí-hámbán-á <i>'we were separating'</i></p> <p>Á- ti-khóngél-a <i>'s/he was praying'</i></p>	<p>sm tm rad fv Vá- ti- vélék- a <i>'they were giving birth'</i></p> <p>Hi -tí- sákán- a <i>'we were playing'</i></p> <p>Á- ti- wúlél- a <i>'s/he was entering'</i></p>
Past Narrative	<p>sm rad fv Hí- p- á</p>	<p>sm rad fv Vá- ránd- á</p>	<p>sm rad fv Vá- lumb- a</p>	<p>sm rad fv Vá- dúkét- á</p>	<p>sm rad fv Vá- vélék- a</p>

Past Emphatic	<i>'then we stole'</i>	<i>'then they loved'</i>	<i>'then they pertained'</i>	<i>'then they experimented'</i>	<i>'then they gave birth'</i>
	Yí- n- á <i>'then it rained'</i>	Hí- wón- á <i>'then we saw'</i>	Hí- dhín- a <i>'then we knocked'</i>	Hí- hámbán- á <i>'then we separated'</i>	Hí- sákán- a <i>'then we played'</i>
	Tí- lw- -á <i>'then they fought'</i>	Á- kúl- á <i>'then s/he grew'</i>	Á- bhál- a <i>'then s/he wrote'</i>	Á- khóngél- a <i>'then s/he prayed'</i>	Á- wúlél- a <i>'then s/he entered'</i>
	sm tm rad fv Hí- só- p- á <i>'then we stole at once'</i>	sm tm rad fv Vá- só- rand- á <i>'then they loved at once'</i>	sm tm rad fv Vá- só- lumb- a <i>'then they pertained at once'</i>	sm tm rad fv Vá- só- dukét- á <i>'then they experimented at once'</i>	sm tm rad fv Vá- só- -velek- a <i>'then they gave birth at once'</i>
	Yí- só- n- a <i>'then it rained at once'</i>	Hí- só- won- á <i>'then we saw at once'</i>	Hí- só- dhin- a <i>'then we knocked at once'</i>	Hi- só-hambán-á <i>'then we separated at once'</i>	Hí- só- sakan- a <i>'then we played at once'</i>
	Tí- só- lw- a <i>'then they fought at once'</i>	Á- só- kul- á <i>'then s/he grew at once'</i>	Á- só- bhal- a <i>'then s/he wrote at once'</i>	Á- só-khóngél-a <i>'then s/he prayed at once'</i>	Á- só- wulel- a <i>'then we entered at once'</i>

Appendix B Paradigm of negative verb forms

	Monosyllabic verb	Dissyllabic verbs		Polysyllabic verb	
		High	Low	High	Low
Infinitive	Pref neg rad fv Ku- ambí- p- á ‘to not steal’ Ku- ambí- n- á ‘to not rain’ Ku- ambí- lw- á ‘to not fight’	Pref neg rad fv Ku- ambí-rand- á ‘to not love’ Ku- ambí-won- á ‘to not see’ Ku- ambí-kul- á ‘to not grow’	Pref neg rad fv Ku-ambí- lumb-a ‘to not pertain’ Ku-ambí- dhín- a ‘to not knock’ Ku-ambí- bhál- a ‘to not write’	Pref neg rad fv Ku-ambí-dukét -á ‘to not experiment’ Ku-ambí-hambán-á ‘to not separate’ Ku-ambí-khóngl- a ‘to not pray’	Pref neg rad fv Ku-ambí-velék-a ‘to not give birth’ Ku-ambí-sákán-a ‘to not play’ Ku-ambí-wúlél-a ‘to not enter’
Imperative	sm neg rad tm U- ngá- p- e ‘do not steal’ - U- ngá- lw- e ‘do not fight’	Pref neg rad tm U- nga- ránd- e ‘do not love’ U- nga- wón- e ‘do not see’ U- nga- kúl- e ‘do not grow’	Pref neg rad tm U- nga- lumb-e ‘do not pertain’ U- nga- dhín- e ‘do not knock’ U- nga- bhál- e ‘do not write’	Pref neg rad tm U- nga- dúkét- e ‘do not experiment’ U- nga- hambán- e ‘do not separate’ U- nga- khóngél- e ‘do not pray’	Pref neg rad tm U- nga- velék-e ‘do not give birth’ U- nga- sákán- e ‘do not play’ U- nga- wulél- e ‘do not enter’
Imperative Plural	sm neg rad tm. pl Mi- nga- p- é- ni ‘do not steal’ - Mi- nga- lw- é- ni ‘do not fight’	sm neg rad tm. pl Mi-nga-ránd-é-ni ‘do not love’ Mi-nga-wón-é-ni ‘do not see’ Mi-nga-kúl- é-ni ‘do not grow’	sm neg rad tm. pl Mi-nga-lumb-é-ni ‘do not pertain’ Mi-nga-dhín-é-ni ‘do not knock’ Mi-nga-bhál-é-ni ‘do not write’	sm neg rad tm. pl Mi-nga- dúkét-é-ni ‘do not experiment’ Mi-nga-hambán-é-ni ‘do not separate’ Mi-nga-khóngél-é-ni ‘do not pray’	sm neg rad tm. pl Mi-nga-velek-é-ni ‘do not give birth’ Mi-nga-sakan-é-ni ‘do not play’ Mi-nga-wulel-é-ni ‘do not enter’
Subjunctive	sm neg rad tm Va- ngá- p- e ‘hope they do not steal’ Yi- ngá- n- e ‘hope it does not rain’	sm neg rad tm Va- nga- ránd- e ‘hope they do not love’ Va- nga- wón- e ‘hope they do not see’	sm neg rad tm Va- nga- lumb- e ‘hope they do not pertain’ Va- nga- dhín- e ‘hope they do not knock’	sm neg rad tm Va- nga- dúkét- e ‘hope they do not experiment’ Va- nga- hambán- e ‘hope they do not separate’	sm neg rad tm Va- nga- velék- e ‘hope they do not give birth’ Va- nga- sákán- e ‘hope they do not play’

	A- ngá- lw- e 'hope s/he does not fight'	A- nga- kúl- e 'hope s/he does not grow'	A- nga- bhál- e 'hope s/he does not write'	A- nga- khóngél- e 'hope s/he does not pray'	A- nga- wulél- e 'hope s/he does not enter'
Hortative	sm neg rad tm Hi- ngá- p- e 'do not let us steal' - Hi- ngá- lw- e 'do not let us fight'	sm neg rad tm Hi -nga- ránd- e 'do not let us love' Hi- nga- wón- e 'do not let us see' Hi- nga- kúl- e 'do not let us grow'	sm neg rad tm Hi -nga- lumb- e 'do not let us pertain' Hi -nga- dhín- e 'do not let us knock' Hi- nga- bhál- e 'do not let us write'	sm neg rad tm Hi- nga- dúkét- e 'do not let us experiment' Hi -nga-hámbán-e 'do not let us separate' Hi- nga-kóngél- e 'do not let us pray'	sm neg rad tm Hi -nga- velék- e 'do not let us give birth' Hi- nga-sakán-e 'do not let us play' Hi- nga-wulél-e 'do not let us enter'
Hortative Plural	sm neg rad tm pl Hi- nga- p- é- ni 'do not let us steal' - Hi- nga- lw- é- ni 'do not let us fight'	sm neg rad tm pl Hi- nga- ránd- é- ni 'do not let us love' Hi -nga- wón- é- ni 'do not let us see' Hi-nga- kúl- é- ni 'do not let us grow'	sm neg rad tm pl Hi -nga- lumb-é-ni 'do not let us pertain' Hi -nga- dhin- é-ni 'do not let us knock' Hi -nga- bhal- é-ni 'do not let us write'	sm neg rad tm pl Hi- nga-dúkét- é-ni 'do not let us experiment' Hi-nga-hámbán-é-ni 'do not let us separate' Hi-nga-khóngél-é-ni 'do not let us pray'	sm neg rad tm pl Hi- nga-velek-é-ni 'do not let us give birth' Hi -nga-sakan-é-ni 'do not let us play' Hi -nga-wulel-é-ni 'do not let us enter'
Potential	sm tm rad neg Ni- ngé- p i 'I cannot steal' Yi- ngé n i 'it cannot rain'	sm tm rad neg Ni- ngé ránd i 'I cannot love' Hi- ngé- wón- i 'we cannot see'	sm tm rad neg A- ngé- lumb- i 's/he cannot pertain' Hi- ngé- dhín- i 'we cannot knock'	sm tm rad neg A- ngé- dúkét- i 's/he cannot experiment' Hi- ngé- hámbán-i 'we cannot	sm tm rad neg Hi- ngé- velék- i 'we cannot give birth' Hi- ngé- sakán- i 'we cannot play'

	Va ngé lw i 'they cannot fight'	Va- ngé- kúl- i 'they cannot grow'	Hi- ngé- bhál- i 'we cannot write'	separate'	Hi- ngé- khóngél-i 'we cannot pray'	Va- ngé- wulél- i 'they cannot enter'
Conditional	sm tm rad neg Vá- sí- p- i 'if they do not steal' Yí- sí -n- i 'if it does not rain' Á -sí -lw- i 'if s/he does not fight'	sm tm rad neg Á- si- ránd- i 'if s/he does not love' Vá- si -wón- i 'if they do not see' Vá- si- kúl- i 'if they do not grow'	sm tm rad neg Á- si- lúmb- i 'if s/he does not pertain' Vá- si- dhín- i 'if they do not knock' Hí- si- bhál- i 'if we do not write'	sm tm rad neg Á- si -dúkét- i 'if s/he does not experiment' Vá- si- hámbán-i 'if they do not separate' Hí- si- khóngél-i 'if we do not pray'	sm tm rad neg Á- si- velék- i 'if she does not give birth' Ú- si- sakán- i 'if you do not play' Hí- si- wulél- i 'if we do not enter'	
Cond Anterior	sm tm/neg rad fv Vá- sá -p- a 'they could not had stolen' Yí- sá- n- a' 'it could not had rained' Á -sá- lw- a 's/he could not had fought'	sm tm/neg rad fv Á- sa- ránd-a 's/he could not had loved' Vá- sa- wón-a 'they could not had seen' Hí- sa- kúl- a 'we could not had grown'	sm tm/neg rad fv Á -sa- lúmb-a 's/he could not had pertained' Vá- sa- dhín-a 'they could not had knocked' Hí- sa- bhál-a 'we could not had written'	sm tm/neg rad fv Á- sa- dúkét- a 's/he could not had experimented' Vá- sa- hámbán-a 'they could not had separated' Hí- sa- khóngél- a 'we could not had prayed'	sm tm/neg rad fv Á- sa- velék-a 'she could not had given birth' Ú- sa- sakán-a 'you could not had played' Hí- sa- wulél-a 'we could not had entered'	
Cond Futu Anterior	sm tm/neg rad fv Vá- sé- p- á 'before they have stolen' Yí- sé- n- a	sm tm/neg rad fv Á- sé- rand-á 'before s/he has loved' Vá- sé- won-á	sm tm/neg rad fv Á- sé- lumb-a 'before s/he has pertained' Vá- sé- dhin- a	sm tm/neg rad fv Á- sé- dukét- á 'before s/he has experimented' Vá- sé- hambán-á 'before they have	sm tm/neg rad fv Á- sé- veleka 'before she has given birth' Ú- sé- sakan-a 'before you have	

Cond Past Anterior	<p><i>'before it has rained'</i> Á- sé- lw- a</p> <p><i>'before s/he has fought'</i></p>	<p><i>'before they have seen'</i> Á- sé- kul- á</p> <p><i>'before s/he has grown'</i></p>	<p><i>'before they have knocked'</i> Hí- sé- bhal- a</p> <p><i>'before we have written'</i></p>	<p><i>separated'</i> Hí- sé- khóngél- a</p> <p><i>'before we have prayed'</i></p>	<p><i>played'</i> Hí- sé- wulel- a</p> <p><i>'before we have entered'</i></p>
	<p>sm tm1 tm2 rad fv Vá- si- sé- p- á</p> <p><i>'before they had stolen'</i></p>	<p>sm tm1 tm2 rad fv Á- si- sé- rand-á</p> <p><i>'before s/he had loved'</i></p>	<p>sm tm1 tm2 rad fv Á- si- sé- lumb- a</p> <p><i>'before s/he had pertained'</i></p>	<p>sm tm1 tm2 rad fv Á- si- sé- dukét- á</p> <p><i>'before s/he had experimented'</i></p>	<p>sm tm1 tm2 rad fv Á- si- sé- velel- a</p> <p><i>'before she had given birth'</i></p>
	<p>Yí- si- sé- n- a</p> <p><i>'before it had rained'</i></p> <p>Á- si- sé- lw- a</p> <p><i>'before s/he had fought'</i></p>	<p>Vá- si- sé- won-á</p> <p><i>'before they had seen'</i></p> <p>Á- si- sé- kul- á</p> <p><i>'before they had grown'</i></p>	<p>Vá- si- sé- dhin- a</p> <p><i>'before they had knocked'</i></p> <p>Hí- si- sé- bhal- a</p> <p><i>'before we had written'</i></p>	<p>Vá- si- sé- hambán- á</p> <p><i>'before they had separated'</i></p> <p>Hí- si- sé- khóngél- a</p> <p><i>'before we had prayed'</i></p>	<p>Ú- si- sé- sakan- a</p> <p><i>'before you had played'</i></p> <p>Hí- si- sé- wulel- a</p> <p><i>'before we had entered'</i></p>
Cond Hypothetic	<p>sm tm1 tm2 rad fv Vá- tí- -sá- p- a</p> <p><i>'if they have not stolen'</i></p> <p>Yí- tí- -sá- n- a</p> <p><i>'if it has not rained'</i></p>	<p>sm tm1 tm2 rad fv Á- tí- sa- ránd- a</p> <p><i>'if s/he has not loved'</i></p> <p>Vá- tí- sa- wón- a</p> <p><i>'if they have not seen'</i></p>	<p>sm tm1 tm2 rad fv Á- tí- sa- lumb- a</p> <p><i>'if s/he has not pertained'</i></p> <p>Vá- tí- sa- dhín- a</p> <p><i>'if they have not knocked'</i></p>	<p>sm tm1 tm2 rad fv Á- tí- sa- dúkét- a</p> <p><i>'if s/he has not experimented'</i></p> <p>Vá- tí- sa- hámbán- a</p> <p><i>'if they have not separated'</i></p>	<p>sm tm1 tm2 rad fv Á- tí- sa- velék- a</p> <p><i>'if she has not given birth'</i></p> <p>Ú- tí- sa- sakan- a</p> <p><i>'if you have not played'</i></p>

	Á- tí- sá- lw- a 'if s/he has not has fought'	Á- tí- sa- kúl- a 'if s/he has not grown'	Hí- tí- sa- bhál- a 'if we have not written'	Hí- tí- sa- khóngél- a 'if we have not prayed'	Hí- tí- sa- wulél- a 'if we have not entered'
Relative Present	sm neg1 radneg2 tm Vá- sí- p- i- kó 'they who do not steal' Yí- sí- n- i- kó 'it that does not rain' Á- si- lw- i- kó 's/he who does not fight'	sm neg1 radneg2 tm Ú- si- ránd- i- kó 'you who do not love' Vá- si- wón- i- kó 'they who do not see' Hí- si- kúl- i- kó 'we who do not grow'	sm neg1 radneg2 tm Vá- si- lúmb- i- kó 'they who do not pertain' Hí- si- dhín- i- kó 'we who do not knock' Á- si- bhál- i- kó 's/he who does not write'	sm neg1 rad neg2 tm Hí- si- dúkét- i kó 'we who do not experiment' Vá- si- hámbán- i- kó 'they who do not separate' Á- si- khóngél- i- kó 's/he who does not pray'	sm neg1 rad neg2 tm Vá- si- velék- i- kó 'they who do not give birth' Hí- si- sakán- i- kó 'we who do not play' Á- si- wulél- i- kó 's/he who does not enter'
Relative Past	sm tm neg rad fv Va- nga- mbí- p- á 'they who did not steal' Yi -nga- mbí- n- á 'it that did not rain' U- nga- mbí- lw- á 'you who did not fight,	sm tm neg rad fv Hi- nga- mbí- rand- á 'we who did not love' Va -nga- mbí- won- á 'they who did not see' A- nga- mbí- kul- á 's/he who did not grow'	sm tm neg rad fv Va- nga- mbí- lúmb- a 'they who did not pertain' Va- nga- mbí- dhín- a 'they who did not knock' Hi- nga- mbí- bhál- a 'we who did not write'	sm tm neg rad fv Va- nga- mbí- dukét- á 'they who did not experimented' Va- nga- mbí- hambán- á 'they who did not separated' Hi- nga- mbí- khóngél- a 'we who did not pray'	sm tm neg rad fv Va- nga- mbí- vélék- a 'they who did not give birth' Hi- nga- mbí- sákán- a 'we who did not play' A- nga- mbí- wulél a 's/he who did not enter'
Relative Future	sm tm neg rad fv Vá- no- mbí- p- á 'they who will not steal'	sm tm neg rad fv Vá- no- mbí- rand- á 'they who will not love'	sm tm neg rad fv Mí- no- mbí- lúmb- a 'you who will not pertain'	sm tm neg rad fv Hí- no- mbí- dukét- á 'we who will not experiment'	sm tm neg rad fv Vá- no- mbí- vélék- a 'they who will not give birth'

	<p>Yí- no- mbí- n- á 'it that will not rain'</p> <p>Ú- no- mbí- lw- á 'you who will not fight'</p>	<p>Hí- no- mbí- won- á 'we who will not see'</p> <p>Á- no- mbí- kul- á 's/he who will not grow'</p>	<p>Vá- no- mbí- dhín- a 'they who will not knock'</p> <p>Hí- no- mbí- bhál- a 'we who will not write'</p>	<p>Vá- no- mbí- hambán- á 'they who will not separate'</p> <p>Á- no- mbí- khóngél- a 's/he who will not pray'</p>	<p>Hí- no- mbí- sákán- a 'we who will not play'</p> <p>Á- no- mbí- wúlél- a 's/he who will not enter'</p>
Present	<p>sm (neg1) rad neg2 Hí- p- i Hi- ká- p- i 'we do not steal'</p> <p>Yí- n- i Yi- ká- n- i 'it does not rain'</p> <p>Tí- lw- i Ti- ká- lw- i 'they do not fight'</p>	<p>sm (neg1) rad neg2 Ú- ránd- i U- ká- ránd- i 'you do not love'</p> <p>Vá- wón- i Va- ká- wón- i 'they do not see'</p> <p>Hí- kúl- i Hi- ká- kúl- i 'we do not grow'</p>	<p>sm (neg1) rad neg2 Hí- lúmb- i Hi- ká- lúmb- i 'we do not pertain'</p> <p>Á- dhín- i A- ká- dhín- i 's/he does not knock'</p> <p>Vá- bhál- i Va- ká- bhál- i 'they do not write'</p>	<p>sm (neg1) rad neg2 Hí- dúkét- i Hi- ká- dúkét- i 'we do not experiment'</p> <p>Vá- hámbán- i Va- ká- hámbán- i 'they do not separate'</p> <p>Ní- khóngél- i Ni- ká- khóngél- i 'I do not pray'</p>	<p>sm (neg1) rad neg2 Vá- velék- i Va- ká- velék- i 'they do not give birth'</p> <p>Hí- sákán- i Hi- ká- sákán- i 'we do not play'</p> <p>Á- wúlél- i A- ká- wúlél- i 's/he does not enter'</p>
Present Expected	<p>sm (neg) tm rad fv Hi- sé- p- á Hi- ká- sé- p- á 'we do not yet steal'</p> <p>Yi- sé- n- a Yi- ká- sé- n- a</p>	<p>sm (neg) tm rad fv U- sé- rand- á U- ká- sé- rand- á 'you do not yet love'</p> <p>Va- sé- won- á Va- ká- sé- won- á</p>	<p>sm (neg) tm rad fv Hi- sé- lumb- a Hi- ká- sé- lumb- a 'we do not yet pertain'</p> <p>A- sé- dhin- a A- ká- sé- dhin- a 's/he does not yet knock'</p>	<p>sm (neg) tm rad fv Hi- sé- dukét- á Hi- ká- sé- dukét- á 'we do not yet experiment'</p> <p>Va- sé- hambán- á Va- ká- sé- hambán- á</p>	<p>sm (neg) tm rad fv Va- sé- velek- a Va- ká- sé- velek- a 'they do not yet give birth'</p> <p>Hi- sé- sakan- a Hi- ká- sé- sakan- a</p>

	<p><i>‘it does not yet rain’</i></p> <p>Ti- sé- lw- a Ti- ká- sé- lw- a <i>‘they do not yet fight’</i></p>	<p><i>‘they do not yet see’</i></p> <p>Hi- sé- kul- á Hi- ká- sé- kul- á <i>‘we do not yet grow’</i></p>	<p></p> <p>Va- sé- bhal- aVa- ká- sé- bhal- a <i>‘they do not yet write’</i></p>	<p><i>‘they do not yet separate’</i></p> <p>Ni- sé-khóngél-a Ni- ká- sé-khóngél-a <i>‘I do not yet pray’</i></p>	<p><i>‘we do not yet play’</i></p> <p>A- sé- wulel-a A- ká- sé- wulel-a <i>‘s/he does not yet enter’</i></p>
Future	<p>sm tm neg rad fv Hí- na- mbí- p- á <i>‘we will not steal’</i></p> <p>Yí- na- mbí- n- á <i>‘it shall not rain’</i></p> <p>Tí- na- mbí- lw- á <i>‘they will not fight’</i></p>	<p>sm tm neg rad fv Ú- na- mbí- rand- á <i>‘you will not love’</i></p> <p>Vá- na- mbí- won- á <i>‘they will not see’</i></p> <p>Hí- na- mbí- kul- á <i>‘we will not grow’</i></p>	<p>sm tm neg rad fv Hí- na- mbí- lumb- a <i>‘we will not pertain’</i></p> <p>Á- na- mbí- dhín- a <i>‘s/he shall not knock’</i></p> <p>Vá- na- mbí- bhál- a <i>‘they will not write’</i></p>	<p>sm tm neg rad fv Hí- na- mbí- dukét- á <i>‘we will not experiment’</i> Vá- na- mbí- hambán- á <i>‘they will not separate’</i> Ní- na- mbí- khóngél- a <i>‘I shall not pray’</i></p>	<p>sm tm neg rad fv Vá- na- mbí- vélék- a <i>‘they will not give birth’</i> Hí- na- mbí- sákán- a <i>‘we will not play’</i></p> <p>Á- na- mbí- wúlél- a <i>‘s/he shall not enter’</i></p>
Future Distant	<p>sm tm1 neg tm2 rad fv Hí- na- mbí- yá- p- á <i>‘we will not (go there to) steal’</i> Hí- na- mbí- tá- p- á <i>‘we will not steal (later)’</i></p> <p>Yí- na- mbí- tá- n- a <i>‘it shall not rain (later)’</i></p>	<p>sm tm1 neg tm2 rad fv Ú- na- mbí- yá- rand- á <i>‘you will not (go there to) love’</i> Ú- na- mbí- tá- rand- á <i>‘you will not love (later)’</i></p> <p>Vá- na- mbí- tá- won- á <i>‘they will not see (later)’</i> Vá- na- mbí- yá- won- á <i>‘they will not (go there to) see’</i></p>	<p>sm tm1 neg tm2 rad fv Hí- na- mbí- yá- lumb- a <i>‘we will not (go there to) pertain’</i> Hí- na- mbí- tá- lumb- a <i>‘we will not pertain (later)’</i></p> <p>Á- na- mbí- tá- dhín- a <i>‘s/he shall not knock (later)’</i> Á- na- mbí- yá- dhín- a <i>‘s/he shall not (go there to) knock’</i></p>	<p>sm tm1 neg tm2 rad fv Hí- na- mbí- yá- dukét- á <i>‘we will not (go there to) experiment’</i> Hí- na- mbí- tá- dukét- á <i>‘we will not experiment (later)’</i></p> <p>Vá- na- mbí- tá- hambán- á <i>‘they will not separate (later)’</i> Vá- na- mbí- yá- hambán- á <i>‘they will not (go there to) separate’</i></p> <p>Ní- na- mbí- tá- khóngél- a</p>	<p>sm tm1 neg tm2 rad fv Vá- na- mbí- yá- vélék- a <i>‘they will not (go there to) give birth’</i> Vá- na- mbí- tá- vélék- a <i>‘they will not give birth (later)’</i></p> <p>Hí- na- mbí- tá- sákán- a <i>‘we will not play (later)’</i> Hí- na- mbí- yá- sákán- a <i>‘we will not (go there to) play’</i></p> <p>Á- na- mbí- tá- wúlél- a</p>

	<p>Tí- na- mbí- tá-lw-a 'they will not fight (later)'</p> <p>Tí- na- mbí- yá-lw-a 'they will not (go there to) fight'</p>	<p>Hí- na- mbí-tá- kul-á 'we will not grow (later)'</p> <p>Hí- na- mbí-yá- kul-á 'we will not (go there to) grow'</p>	<p>Vá-na- mbí- tá-bhal-a 'they will not write (later)'</p> <p>Vá-na- mbí- yá-bhal-a 'they will not (go there to) write'</p>	<p><i>'I shall not pray (later)'</i></p> <p>Ní- na- mbí-ya-khóngél-a 'I shall not (go there to) pray'</p>	<p><i>'s/he shall not enter (later)'</i></p> <p>Á- na- mbí-yá-wúlél-a 's/he shall not (go there to) enter'</p>
Past Perfect	<p>sm tm/neg rad fv Hi- yá- p- a 'we have not stolen'</p> <p>Yí- yá- n- a 'it has not rained'</p> <p>Tí- yá- lw- a 'they have not fought'</p>	<p>sm tm/neg rad fv U- yá- ránd-a 'you have not loved'</p> <p>Va- yá- wón- a 'they have not loved'</p> <p>Hi- yá- kúl- a 'we have not grown'</p>	<p>sm tm/neg rad fv Hi- yá- lumb-a 'we have not pertained'</p> <p>A- yá- dhín- a 's/he has not knocked'</p> <p>Va- yá- bhál- a 'they have not written'</p>	<p>sm tm/neg rad fv Hi- yá- dúkét-a 'we have not experimented'</p> <p>Va- yá- hámbán-a 'they have not separated'</p> <p>Ni- yá- khóngél-a 'I have not prayed'</p>	<p>sm tm/neg rad fv Va- yá- velék-a 'they have not given birth'</p> <p>Hi- yá- sakán-a 'we have not played'</p> <p>A- yá- wulél-a 's/he has not entered'</p>
Past Anterior	<p>sm tm neg rad fv Hí- tí- sá- p- a 'we had not stolen'</p> <p>Yí- tí- sá- n- a 'it had not rained'</p> <p>Tí- tí- sá- lw- a 'they had not fought'</p>	<p>sm tm neg rad fv Ú- tí- sa- ránd- a 'you had not loved'</p> <p>Vá- tí- sa- wón- a 'they had not see'</p> <p>Hí- tí- sa- kúl- a 'we had not grown'</p>	<p>sm tm neg rad fv Hí- tí- sa- lumb- a 'we had not pertained'</p> <p>Á- tí- sa- dhín- a 's/he had not knocked'</p> <p>Vá- tí- sa- bhál- a 'they had not written'</p>	<p>sm tm neg rad fv Hí- tí- sa- dúkét-a 'we had not experimented'</p> <p>Vá- tí- sa- hámbán-a 'they had not separated'</p> <p>Ní- tí- sa- khóngél-a 'I had not played'</p>	<p>sm tm neg rad fv Vá- tí- sa- velék-a 'they had not given birth'</p> <p>Hí- tí- sa- sakán-a 'we had not played'</p> <p>Á- tí- sa- wulél-a 's/he had not entered'</p>

Past Anterior Expected	<p>sm tm neg rad fv Hí- tí- sé- p- á ‘we had not yet stolen’ Yí- tí- sé- n- a ‘it had not yet rained’</p> <p>Tí- tí- sé- lw- a ‘they had not yet fought’</p>	<p>sm tm neg rad fv Ú- tí- sé- rand- á ‘you had not yet loved’ Vá- tí- sé- won- á ‘they had not yet seen’ Hí- tí- sé- kul- á ‘we had not yet grown,</p>	<p>sm tm neg rad fv Hí- tí- sé- lumb- a ‘we had not yet pertained’ Á- tí- sé- dhin- a ‘s/he had not yet knocked’ Vá- tí- sé- bhal- a ‘they had not yet written’</p>	<p>sm tm neg rad fv Hí- tí- sé- dukét-á ‘we had not yet experimented’ Vá- tí- sé- hambán-á ‘they had not yet separated’ Ní- tí- sé- khóngél- a ‘I had not yet prayed’</p>	<p>sm tm neg rad fv Vá- tí- sé- velek- a ‘they had not yet given birth’ Hí- tí- sé- sakan- a ‘we had not yet played’ Á- tí- sé- wulel- a ‘s/he had not yet entered’</p>
Past Anterior Unexpected	<p>sm tm rad fv Hí- sé- p- á ‘before we have stolen’ Yí- sé- n- a ‘before it has rained’</p> <p>Tí- sé- lw- a ‘before they have fought’</p>	<p>sm tm rad fv Ú- sé- rand- á ‘before you have loved’ Vá- sé- won- á ‘before they have seen’ Hí- sé- kul- á ‘before we have grown’</p>	<p>sm tm rad fv Hí- sé- lumb- a ‘before we have pertained’ Á- sé- dhin- a ‘before s/he has knocked’ Vá- sé- bhal- a ‘before they have written’</p>	<p>sm tm rad fv Hí- sé- dukét- á ‘before we have experimented’ Vá- sé- hambán- á ‘before we have separated’ Ní- sé- khóngél- a ‘before I have prayed’</p>	<p>sm tm rad fv Vá- sé- velek- a ‘before they have given birth’ Hí- sé- sakan- a ‘before we have played’ Á- sé- wulel- a ‘before s/he has entered’</p>
Past Continuous		<p>sm tm neg1 rad neg2 Ú- tí- si- ránd- i ‘you were not loving’</p>	<p>sm tm neg1 rad neg2 Hí- tí- si- lumb- i ‘we were not pertaining’</p>	<p>sm tm neg1 rad neg2 Hí- tí- si- dúkét- i ‘we were not experimenting’</p>	<p>sm tm neg1 rad neg2 Vá- tí- si- velék- i ‘they were not giving birth’</p>

Past Narrative	<p>sm tm neg1 rad neg2 Hí- tí- sí- p- i 'we were not stealing'</p> <p>Yí- tí- sí- n- i 'it was not raining'</p> <p>Tí- tí- sí- lw- i 'they were not fighting'</p> <p>sm neg1 rad neg2 Hí- sí- p- i 'then we did not steal'</p> <p>Yí- sí- n- i 'then it did not rain'</p> <p>Tí- sí- lw- i 'then they did not fight'</p>	<p>Vá- tí- si- wón- i 'they were not seeing'</p> <p>Hí- tí- si- kúl- i 'we were not growing'</p> <p>sm neg1 rad neg2 Ú- si- ránd- i 'then you did not love'</p> <p>Vá- si- wón- i 'Then they did not see'</p> <p>Hí- si- kúl- i 'then we did not grow'</p>	<p>Á- tí- si- dhín- i 's/he was not knocking'</p> <p>Vá- tí- si- bhál- i 'they were not writing'</p> <p>sm neg1 rad neg2 Hí- si- lúmb- i 'then we did not pertain'</p> <p>Á- si- dhín- i 'then s/he did not knock'</p> <p>Vá- si- bhál- i 'then they did not write'</p>	<p>Vá- tí- si- hámbán- i 'they were not separating'</p> <p>Ní- tí- si- khóngél- i 'I was not praying'</p> <p>sm neg1 rad neg2 Hí- si- dúkét- i 'then we did not experiment'</p> <p>Vá- si- hámbán- i 'then they did not separate'</p> <p>Ní- si- khóngél- i 'then I did not pray'</p>	<p>Hí- tí- si- sakán- i 'we were not playing'</p> <p>Á- tí- si- wulél- i 's/he was not entering'</p> <p>sm neg1 rad neg2 Vá- si- velék- i 'then they did not give birth'</p> <p>Hí- si- sakán- i 'then we did not play'</p> <p>Á- si- wulél- i 'then s/he did not enter'</p>

Appendix C - Questionnaire

Dear speaker of Cilenge,

I am carrying out a research in negation and tense markers in the verb structure in Cilenge for my Master degree in African Languages at the University of South Africa (UNISA). For the success of this study, I wish to record narratives or stories about events or daily activities for subsequent analysis. It would be helpful if you answer the following questions:

1. What is your main activity in this village?
2. Could you describe how that activity is carried out?
3. How did you do your activity in olden days?

Thank you for your time.

ⁱ This figure was drawn during the colonial era, as reflected in some place names. The updated names are: Maputo (ex-Lourenço Marques), Xai-Xai (ex-João Belo), Chimoio (ex-Vila Pery), Angónia (ex-Vila Coutinho), Lichinga (ex-Vila Cabral), Pemba (ex-Porto Amélia).

ⁱⁱ Portuguese is mainly spoken in urban areas and it is the mother tongue of 26.4% of the population, whereas in the rural areas it is the mother tongue for 3.5% of the population. (INE 2010b:37) .

ⁱⁱⁱ Doke (1945:97) states that this book was published in 1933 in Lisbon.

^{iv} We follow the system used by Guthrie (1948): for designating languages, he employs initial capital letter and small letters for the prefixes, which indicate languages. Thus, the name of a certain language should carry a noun prefix or even should appear only with its nominal stem (as adjective).

^v Mafura is a fruit of the mafureira, known as [Mozambique tree, is this the name for mafura in English] from which delicious oil is extracted named *ntoná* (in Tsonga/Changana *munyantŕ*). The seeds *tikhusu* are used for making soap.